

American journal of numismatics.

New York : American Numismatic Society, 1989-

<http://hdl.handle.net/2027/inu.30000025455118>

HathiTrust



www.hathitrust.org

Creative Commons Attribution-NonCommercial-ShareAlike

http://www.hathitrust.org/access_use#cc-by-nc-sa-4.0

This work is protected by copyright law (which includes certain exceptions to the rights of the copyright holder that users may make, such as fair use where applicable under U.S. law), but made available under a Creative Commons Attribution-NonCommercial-ShareAlike license. You must attribute this work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work). This work may be copied, distributed, displayed, and performed - and derivative works based upon it - but for non-commercial purposes only (if you are unsure where a use is non-commercial, contact the rights holder for clarification). If you alter, transform, or build upon this work, you may distribute the resulting work only under the same or similar license to this one. Please check the terms of the specific Creative Commons license as indicated at the item level. For details, see the full license deed at <http://creativecommons.org/licenses/by-nc-sa/4.0>.

B
American Journal of Numismatics, Second Series

AMERICAN JOURNAL OF NUMISMATICS

5-6



Second Series, continuing
The American Numismatic Society Museum Notes

THE AMERICAN NUMISMATIC SOCIETY

NEW YORK

1993-94

THE AMERICAN NUMISMATIC SOCIETY

Founded 1858 · Incorporated 1865

BROADWAY BETWEEN 155TH AND 156TH STREETS
NEW YORK, N.Y. 10032

PURPOSES: The Society was founded for the collection and preservation of coins, medals, decorations and paper money and for the investigation of their history and other subjects connected therewith.

MEMBERSHIP: Applications for membership are welcomed from all interested in numismatics. Inquiries regarding membership should be addressed to the Secretary of the Society.

DUES: The annual dues for an Associate Membership are \$40.00. Issues of the *American Journal of Numismatics* (formerly *Museum Notes*), the *Annual Report*, and the quarterly *Newsletter* are distributed to all members in good standing.

PUBLICATIONS: The *American Journal of Numismatics* is a scholarly journal containing articles on numismatic topics. The Numismatic Notes and Monographs consist of separately issued publications, each on a single topic. Numismatic Studies is a series accommodating works in a larger format. *Numismatic Literature*, published twice a year, is an international abstract bibliography of the current literature in the profession. Ancient Coins in North American Collections publishes private collections. The Society is also engaged in the systematic publication of its entire Greek coin collection in *Sylloge Nummorum Graecorum: The American Numismatic Society*. Following the annual Coinage of the Americas Conference, the papers presented are edited and published.

MUSEUM: The Society maintains a museum located in uptown Manhattan, New York City, which houses its offices, collections and library. Collections embrace coins of all periods from their inception to modern times, medals, and decorations. Selections from its cabinets are on display in an exhibition. The library, consisting of over 90,000 titles, covers all branches of numismatics.

The museum is open to Members and the public from 9 A.M. to 4:30 P.M. on Tuesdays, Wednesdays, Thursdays, Fridays, and Saturdays. In addition, the public exhibition is open on Sundays from 1 to 4 P.M. The museum is closed on Mondays and the following holidays: New Year's Day, Lincoln's Birthday, Independence Day, Election Day, Thanksgiving Day, the fourth Friday in November, the fourth Saturday in November, December 24, Christmas Day. The public exhibition is open to the public from 10 A.M. to 4:30 P.M. on the fourth Friday and the fourth Saturday of November.

American Journal of Numismatics, Second Series

AMERICAN JOURNAL OF NUMISMATICS

(New York, N.Y. ; 1989)

5-6



CJ
1
.A516
no. 5-6

Second Series, continuing
The American Numismatic Society Museum Notes

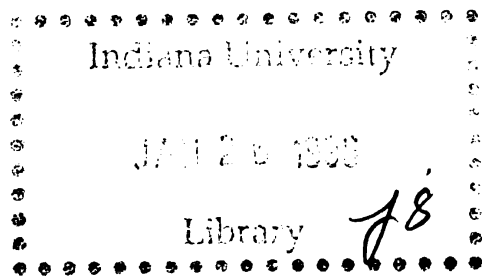
THE AMERICAN NUMISMATIC SOCIETY

NEW YORK

1993-94

© Copyright 1995
The American Numismatic Society

ISSN 0145-1413
ISBN 0-89722-259-8



IO AAY 8233
no. 5/6 1993/1994
Shelves: Main

COMPOSED AND PRINTED IN BELGIUM AT CULTURA, WETTEREN

CONTENTS

GREEK

- LEO MILDENBERG. The Cyzicenes: A Reappraisal 1
- CHARLES A. HERSH AND HYL A. TROXELL. A 1993 Hoard of
Alexander Drachms from the Near East 13
- DIMITER DRAGANOV, ARTHUR HOUGHTON, AND WAYNE MOORE.
Four Seleucid Notes 43

ROMAN

- STEVEN CERUTTI. Brutus, Cyprus, and the Coinage of 55 B.C. 69
- PETER KOS. Festive Issues of Galerius from the Tetrarchic Mint
of Siscia 89

BYZANTINE

- JANE DEROSE EVANS. Heraclian Countermarks on Coins Found
at Caesarea 97

ISLAMIC

- HODGE MEHDI MALEK. The Dābūyid Ispahbads of Ṭabaristān 105

SOUTH ASIAN

- GERALD M. BROWNE. New Readings of Legends on Gupta Gold
Dīnāras 161

MEDALS

- ALAN M. STAHL AND LOUIS WALDMAN. The Earliest Known Med-
alists: The Sesto Brothers of Venice 167

WESTERN HEMISPHERE

- ALAN M. STAHL. Coins from the Excavations at La Isabela,
Dominican Republic, the First European Colony in the New
World 189

CALENDAR MEDALS

- A. J. TURNER. A Seventeenth Century Calendar Scale for Medals
and Mathematical Instruments 209

BOOK REVIEWS

ANCIENT

- PRICE, *The Coinage in the Name of Alexander the Great and Philip
Arrhidaeus*. Robert A. Bauslaugh 221
- POTTS, *The Pre-Islamic Coinage of Eastern Arabia*. Carmen
Arnold-Biucchi 234
- BURNETT, AMANDRY, AND RIPOLLÈS, *Roman Provincial Coinage,
1, From the Death of Caesar to the Death of Vitellius (44 B.C.-
A.D. 69)*. John H. Kroll 241
- LIGHTFOOT, BLAND, LÁNGI AND KOS, recent books on Roman
finds. William E. Metcalf 248
- EVANS, *The Art of Persuasion: Political Propaganda from Aeneas
to Brutus*. Richard D. Weigel 251

MEDIEVAL AND MODERN

- WEILLER, *La Circulation monétaire et les trouvailles numismatiques
du moyen age et des temps modernes au pays de Luxembourg, 2.*
John M. Kleeberg 255
- RAYNOR, MITCHEL AND REEDS, recent books on Great Britain.
Harrington E. Manville 258

- ADAMS, *United States Numismatic Literature, 1, Nineteenth Century Auction Catalogs, and 2, Twentieth Century Auction Catalogues*. John M. Kleeberg 263
- GILLILLAND, *Sylloge of the United States Holdings in the National Numismatic Collection of the Smithsonian Institution, 1, Gold Coins*. John M. Kleeberg 265

ASIAN

- CRIBB, *A Catalogue of Sycee in the British Museum: Chinese Silver Currency Ingots, c. 1750-1933*. Richard G. Doty 266
- ERRINGTON AND CRIBB, EDS., *The Crossroads of Asia: Transformation in Image and Symbol in the Art of Ancient Afghanistan and Pakistan*. Michael L. Bates 269
- EDITORIAL BOARD OF "XINJIANG NUMISMATICS," *Xinjiang Numismatics*. Michael L. Bates 271

THE CYZICENES: A REAPPRAISAL

(PLATES 1-2)

LEO MILDENBERG

Early in this century B. V. Head remarked that the "Cyzicene mint possessed a practical monopoly of coining"¹ the electrum staters, Cyzicenes, that circulated along the Ionian and Caspian Seas. In 1931 K. Regling called this electrum coinage of Cyzicus "Die interessanteste Münzreihe aller Zeiten und Länder."² It is no wonder, then, that early scholarship dealt so extensively with the material.³ In particular, there were studies of the metallurgical findings, as well as of the exchange rate against other currencies.⁴ Further studies dealt with the chronology,⁵ the iconography,⁶ the circulation,⁷ and the occurrence of the

¹ *HN*, p. 522. An abbreviations list follows this article.

² *Prinkipo*, p. 3.

³ H. v. Fritze's corpus-like study of 1912, based on the observation of the development of the quadratum incusum, is still the basis of today's scholarship. Significant additions have been Regling's *Prinkipo* hoard publication of 1931; M. Laloux's survey of the sources in *RBN* 1971; and the die study in *Cat. Gulbenkan* 2, p. 62, showing one reverse linked with six obverses. M. R. Kaiser-Raiss is preparing a corpus of the electrum coinage of Cyzicus using the materials collected by the late F. Bodenstein.

⁴ See R. Bogaert, M. S. K. Eddy, J. Guépin, J. F. Healy, D. Rouvier, W. E. Thompson, and H. T. Wade-Gery.

⁵ According to v. Fritze, the electrum coinage of Cyzicus began as early as the last decade of the seventh century B. C. His chronology has been widely accepted. It must be recognized, however, that the quadratum incusum of the very early anonymous electrum coins and that on the early Cyzicus specimens differ considerably. Furthermore, the inclusion of the earliest tunny-head pieces in the first series of the

Cyzicenes in ancient sources.⁸ Some essential questions, however, have neither been asked nor answered.

AN EXTRAORDINARY COINAGE

The Cyzicenes are at once extraordinary and unique. There is no other ancient municipal coinage in precious metal which was produced without interruption for over 220 years. The great and long-lasting money production was Cyzicus's own achievement: it was never prohibited or disturbed by her powerful overlords, the great kings of Persia and the Athenians.⁹ Cyzicus was a small city on a peninsula with two harbors in a favorable, sheltered position between the Hellespont and Thracian Bosporos. It was neither a major power nor an independent state. Yet even at Athens the Cyzicenes became a popular currency, a position which no other foreign coinage ever attained there.

The defining characteristics of the Cyzicenes are at once monumental in their constancy and in their variety: the denominations (staters and

Cyzicenes indicates that the coinage cannot have been initiated much earlier than 550 B.C. This author suggests 570 B.C. as the earliest date for the coinage. The production of the Cyzicenes, but not their circulation, came to an end during the reign of Alexander, not later than 330 B.C.

⁶ The diversity and beauty of the full range of 240 different obverse images have fascinated scholars although some have over-emphasized the influence of Greek models. There are a few obvious direct imitations, such as the Gela river god protome (Plate 1, 14; v. Fritze, 174). Others are ingenious modifications, such as the Tarentum dolphin rider holding a tunny with a second tunny below (Plate 1, 11; v. Fritze, 110). The majority of the images, however, were created in Cyzicus itself with a preference first for animals and monsters and later for statuary representations and human images.

⁷ Hoard distribution shows an intense circulation at the Propontis (*ICGH* 1239: Prinkipo); Thracia, the lower Danube, and Dnjestr region (*ICGH* 689, 714, 726, 734, 1002); and the Tauric Chersonese and lower Don region (*ICGH* 1011, 1012, 1013). See below for the importance of the Cyzicenes in the Athenian economy. On single finds from the western and northern shores of the Black Sea, see Bulatovich, Poenaru-Bordea, Shelov, and Zograph. See also, *Coin Hoards* 1, 20; 2, 1.1, 2.4 and 2.7.

⁸ For proof of frequent transactions in Cyzicenes between Greece and the Black Sea region, see the sources cited in Prinkipo, pp. 44–45, and Laloux, pp. 45–49.

⁹ This impressive fact was mentioned in 1913 by Gardner and stressed by Miltenberg in "Über das Münzwesen." See also Laloux's remark, p. 34, "Les Perses auraient même favorisé le monnayage de Cyzique."

one sixth staters)¹⁰ are constant; the quadratum incusum as reverse is immutable; and there is a multiplicity of obverse images that changed allegedly year after year.¹¹ The metallic content and thus the color of each specimen may differ, but the weight, established *al pezzo*, remains always the same, at 16 g.¹² The whole electrum is anepigraphic: neither the full nor the abbreviated name of the city is found on the Cyzicenes.¹³ The electrum coinage and Cyzicus's prolific silver coinage (obols and their divisions in the sixth and fifth centuries, tetradrachms of Rhodian standard in the fourth) run side-by-side, but remain strictly separated and basically different from each other.

THE TRADE COINAGE

Cyzicus's electrum money has been found near the Bosphorus and Dardanelles, in Thrace, the Tauric Chersonese, and Colchis, as well as in western Asia Minor and northern Greece.¹⁴ The Cyzicenes were a generally accepted means of payment, indispensable along the grain routes on land and sea. There are no indications that Cyzicus had direct access to

¹⁰ The Cyzicene electrum coinage is mainly comprised of the stater and its sixth, the hecte. Only a few one-twelfth staters, or hemihectes, were struck, mostly in the sixth century. Even fewer one-twenty-fourth staters are known (*Cat. Gulbenkian* 2, 645, with lyre, an exceptional motif).

¹¹ *Cat. Gulbenkian* 2, p. 61: "It seems extremely tempting to think that such a number of types might be of a more or less annual nature." But, see below, pp. 7–8 for this author's viewpoint.

¹² This weight corresponds to roughly two Persian darics. It is noteworthy that both the imperial gold daric and the Cyzicene kept their full weight until the end of production. Obviously, the Cyzicus mint personnel successfully mixed alloys of quite different metallic composition and value, but nevertheless properly fixed the weight of each single flan before striking. For the high technical level of the work in the mint at Cyzicus see above, n. 4, especially Rouvier, p. 18, fig. V, who holds that the required weight was calibrated by filing.

¹³ There exists only one inscription, the word ΕΛΕΥΘΕΡΙΑ, in two lines on six late staters and one twelfth-stater (v. Fritze, 215; Prinkipo, 129–34). This is, however, a mere description of the image and a sort of homage to "freedom," rather than an allusion to a historical event or a reproduction in small scale of a statue.

¹⁴ See above, n. 7.

precious metals. There are rivers to the south which may have carried alluvial gold nuggets or sand, but their embankments were hardly owned by citizens of Cyzicus. Nearby, to the south, at Daskyleion, resided the Persian satrap of northwestern Asia Minor. The salting and exporting of fish,¹⁵ presumably tunny, could not have been profitable enough to pay for the substantial import of precious metal required for the Cyzicus mint. Why and how did it happen then that such a highly important trade coinage came into being and endured for centuries in a small city? It would seem to be due to the vision, industry, political, and technical skill of the Cyzicus administrative and minting authority along with the tolerance of their overlords.

THE CONVENTIONAL COINAGE

The color of the individual Cyzicus specimens differed considerably. Thus, it is obvious that the real value in precious metal of all Cyzicenes was not equal. Yet, their general acceptance must have been undisputed. "It seems even very unlikely that such a stater or hecte had ever been put on a scale, as it was well known that their weight itself did not change," as Kraay put it.¹⁶ It sufficed that the customer always saw the tunny badge and the incuse square. Thus, we are dealing with a purely conventional coinage.¹⁷ Buyer and seller agreed from the beginning that the business would be conducted in Cyzicus's electrum money in the simplest possible way. The Cyzicenes could even be changed at a fixed rate against local silver coins, as the Olbia decree clearly demonstrates: one Cyzicene was to be firmly equal to eleven Olbia silver staters with the same buying and selling rate. All other monetary exchange rates were to be negotiated between the dealers involved.¹⁸

¹⁵ See Laloux, p. 33 with n. 5, and Kraay-Hirmer, p. 368.

¹⁶ *ACGC*, p. 261.

¹⁷ *Cat. Gulbenkan* 2, p. 62: "It is clear that some degree of conventionality must have entered into the question of the value of the Cyzicenes," but it must be stressed that full convertibility by convention was the precondition for the factual monopoly of the Cyzicenes as an international trade currency.

¹⁸ Dittenberger, n. 218.

The Cyzicenes were widely used in both local and international credit businesses by the Athenian public and by institutional and private contractors. At the beginning of the fourth century, the treasury of the Pallas Athena temple granted a loan to the city of Athens payable in silver and in Cyzicus's electrum staters.¹⁹ The temple and state officials knew that the Cyzicenes were a stable, generally accepted currency. Likewise, a refund of a personal credit in the year 327, mentioned by Demosthenes, *Against Phormion* 23, is especially noteworthy, as it shows the importance of the Cyzicenes in international trade, even after Cyzicus was forced to cease its own money production.²⁰

It did not matter that the single specimens differed in color (golden, reddish, or pale) as it was a practice of long standing in Athens that the Cyzicenes, and they alone, had been excluded from the usual control procedure which all other foreign coins had to undergo.²¹ In the vast territories where it circulated, the receiver of a Cyzicene knew by experience that the next merchant would take it at full rate, even if it sometimes looked rather suspicious. Without such a stable, smoothly functioning convention the receiver would have been forced to ask for full metallic value which would have been established by a trial cut or other test. No Cyzicenes with trial cuts are known, not even on those that look very pale.

¹⁹ Laloux, pp. 46–49.

²⁰ "Vers 327 un marchand aurait remboursé un prêt de 2000 drachmes contracté à Athènes pour le voyage allée-retour au Pont. Au lieu de remettre la somme de 2600 drachmes à Athènes même, comme convenu, il aurait payé 120 statères de Cyzique au Bosphore" (Laloux, p. 64). This was a bad rate for the merchant, as he got less than 22 Athenian drachms for one Cyzicus electrum stater, whereas at Athens he would have received at least 24 drachms (see n. 21).

²¹ The fixed relation in accounting at Athens seems to have been 2 Cyzicenes equalled 24 Athenian drachms, or 6 "owl" tetradrachms. Eddy (pp. 13–16, nn. 11–13) surveys the proposals of several scholars and concludes (pp. 21–22) that the Athenians accepted the Cyzicenes at the rate of 24 drachms, but asked 24 drachms and 5 obols when they dispersed them. Thus, the difference between the buying and selling rates was 5 obols. In this way Athenian bankers earned 5 obols selling the valuable Cyzicenes, "a very important international currency" (Eddy, p. 21), but at the same time acknowledged the general acceptance of the Cyzicenes by abstaining from checking them for weight and/or fineness.

THE INTERNATIONAL COINAGE

As no inscriptions were put on the coinage, it obviously means that they were not needed. One can understand that the Cyzicenes were well known without explanatory legends in the Marmara Sea region, but they are also found in large parts of the ancient world. Further, all documents known, especially the Athenian and Olbian texts, prove their undisputed strong position in the international trade. The gold darics of the Persian Empire, the Athenian silver tetradrachms, and Alexander's imperial gold and silver issues are certainly leading international coinages issued by great powers. But what stood behind the Cyzicus electrum? Certainly there was neither a decisive political strength nor a considerable economic one. A comparable city was Tyre, an island in a good topographical situation with a busy port, favored too by Persia, but with its ship-building industry in a far stronger economic position. The great city of Tyre, however, created a silver coinage only beginning around 450, with a restricted area of circulation.²² The city of Cyzicus, however, in spite of all its limitations, succeeded in transforming its time-honored local electrum into an international trade coinage which had no equal in antiquity.

THE PLETHORA OF IMAGES

The Persian gold daric and silver siglos displayed only one image, the armed great king with the spiked crown, in Persian attire, from Darius I until Alexander. For centuries, the Athenian silver tetradrachms, introduced around 525 BC., always showed one image for the obverse, the helmeted profile head of Pallas Athena facing right, and one image for the reverse, the seated owl with the letters ΑΘΕ. This uniformity and monumentality together with the high metallic quality were forceful factors in the creation and the success of these world currencies.

²² It is doubtful whether preellenistic Tyrian coins circulated outside Phoenicia. *IGCH* lists only three hoards (1252, 1256, 1259) from southeastern Anatolia with one or two isolated Tyrian pieces. But none of these three hoards is undisputed and even the find places are not certain (e.g., 1252: "Asia Minor or Egypt").

In other great coinage of the Greek world one image for obverse and reverse likewise prevailed, but the die engravers had a free hand to vary the representations. Thus, while at Syracuse a magnificent, diversified coinage arose, the obverse always showed a female head surrounded by four dolphins and the reverse always showed a chariot, either slow or fast moving. In Thracian Abdera one obverse image, the griffin, was retained, while the reverse image changed regularly, although this occurred over a limited time span in the second half of the fifth and the first quarter of the fourth centuries.²³

On the Cyzicenes the obverse images are constantly changed during the whole period of production, from about 550 to 330 B.C., amounting "to around 240 different types."²⁴ Why was there this plethora of images on the electrum coinage of Cyzicus? The basic conceptional difference between local city silver money and electrum trade coinage has been noted, and Kraay stresses that "it is unlikely that official transactions at Cyzicus were conducted in electrum rather than in the silver which bore the city's name and its types. . . ."²⁵ But this gives no explanation for the impressive variety of images.

The idea that the plethora of images was caused by the necessity to prepare one design for each annual production of the Cyzicenes has to be dismissed. This assumption has been too readily adopted, especially by scholars who stressed that the approximate number of images should be increased from 220 to about 240.²⁶ The entire time span of the production of the Cyzicenes is 220 years, 240 at the most. If the annual theory were accepted, then we would already know all the images ever used and there would not be any additional unknown images. Can we really claim omniscience and conclude that no new images are hidden in

²³ May, 187–461 (mainly periods 5–8, 445–375 B.C.). Furthermore, changing images on the Abdera reverses occur only in connection with the changing inscriptions of the magistrates' names. On the magistrates and other mint officials, see Furtwängler, and on Abdera, Furtwängler, pp. 16–18.

²⁴ *Cat. Gulbenkan* 2, p. 61.

²⁵ *ACGC*, p. 261. See Kraay-Hirmer, p. 368, stating that the Cyzicenes were a "trade currency, comparable to the Maria Theresa Taler."

²⁶ See also H. A. Cahn in *Kunstfreund*, p. 12.

the earth of the vast territories where the Cyzicenes circulated?²⁷ In addition, in a business transaction, the payer and the recipient of Cyzicenes did not care whether these coins were produced annually or at irregular intervals. All that mattered for them was that the Cyzicenes were available and the recipient could be sure that they were unquestionably acceptable.

It has also been proposed to understand the varying images on the Cyzicenes as the signatures of the changing magistrates responsible for the electrum coinage. This is not a convincing alternative. The names of magistrates occur on late classical and hellenistic coinage, not in the sixth and fifth century. There is no evidence to date for such a specialized office in Cyzicus.²⁸ The appointment of new magistrates annually, or for shorter or longer periods of time, would demand at least 240 different civil servants. This practice would have been detrimental to a smoothly functioning, continuous mint activity. Not individual short-term officials, but the municipality as a whole was responsible for the planning, production, and marketing of the Cyzicenes.

Is there then quite another explanation for the ever growing number of images? Surely the authorities of Cyzicus made a virtue out of necessity. For technical reasons the reverse dies with the incuse square had to be put into the anvil,²⁹ whereas usually the obverse die is embedded in this sheltered position. As it was the die with the image that had to endure the blow of the striking hammer, many more image dies than incuse square dies were needed.

In Cyzicus one could have ordered, of course, one new die after the other of a constant, never-changing motif, as the minting authorities of the darics and the Athenian owl tetradrachms did. Obviously, the Cyzicus municipality considered the eternal incuse squares and tunny

²⁷ Only a few images are known for the early Cyzicenes. The wealth of designs begins with v. Fritze's group IIa which is dated around 520 B.C. by recent scholarship. The number of different images must be considerably higher than the number of years of production.

²⁸ See Furtwängler, p. 16.

²⁹ Clearly demonstrated by Rouvier, p. 16 and figs. 8–10. This is also shown by the die study in *Cat. Gulbenkian* 2, p. 62.

badges³⁰ sufficient to establish the stability of their international trade currency.³¹ At the same time they succeeded in making the Cyzicenes appealing to many different peoples by the beauty, diversity, and numbers of their changing images.³² It seems obvious that in Cyzicus the municipal authority, the city council, was well aware of the far-reaching effect of the altered images on the unwavering popularity of their international, conventional trade coinage. They adopted beautiful and interesting motifs wherever they could get them, at home and abroad. They depicted gods, human beings, and animals in addition to statues, everyday scenes, and monsters. Inanimate objects were rarely chosen as they may have been considered uninteresting. The lyre (v. Fritze, 181) could at least be played, and thus awakened to life. Most of the many images are beautifully engraved, and Cyzicus's commercial money was art par excellence.

THE CYZICENES AND THE GREAT POWERS

It seems incredulous that it has not been asked why the great kings of Persia did not simply take over the Cyzicene mint. It produced a well established, successful trade coinage for a small city situated within

³⁰ During the entire long coinage period of the Cyzicenes, the tunny fish appears as clearly recognizable, in rather large size, and in a prominent place, often supporting the varying obverse images. It cannot be maintained that on late archaic Cyzicenes the tunny badge was reduced to a small symbol. See literature quoted by Furtwängler, pp. 5-7 with nn. 9-20.

³¹ It has been stressed that the primary identification sign of the electrum coinage of Cyzicus, Mytilene, and Phocaea was the combination of flan shape and metal and types, "die 'Einheit' Schrötlingform - Metall - Typenwechsel" (Furtwängler, p. 23). At Cyzicus, however, there are varying flan forms. There are other characteristics that distinguish the Cyzicenes. In particular, there was the remarkable retention of the incuse square until the very end of the production, while elsewhere it was long out of fashion. Also noteworthy was the permanent, obvious appearance of the tunny badge. Equally important was the unwavering full weight and the continuing use of electrum. Also significant was the intentional altering and embellishment of the obverse designs.

³² For a plausible explanation of how the municipal authority procured the motifs and selected the best, see Furtwängler, p. 20, n. 96. For the iconography and its general interpretation, see above, n. 6.

their realm and even in close proximity to their main administrative center. Was not the Cyzicene a strong formidable competitor with their gold daric? No, it was not. It has been said that the Archaemenids possessed a monopoly on gold coinage.³³ They did not even think of such a prerogative. They relied on their own imperial coinage, the gold daric and the silver siglos, and permitted local monetary production.³⁴ Throughout their empire they fostered not only local autonomy in political, economic, and cultural matters,³⁵ but also in money production. Their coinage policy cannot be understood in the categories of law and administration of the later centralist states. The electrum coinage of Cyzicus had begun well before Cyrus's generals conquered northwest Asia Minor in the late forties of the sixth century, but it could never have been continued and extended without the explicit or tacit permission of the Achaemenids.

For about 150 years during the city's long coinage period of at least 220 years, Cyzicus was Persian—from about 540 until 445 B.C., and again from 387 up to the end of the empire.³⁶ During the Athenian hegemony in the intermediate period of about 60 years, the production of the Cyzicenes continued as usual. This is an astounding fact. Whereas Athens enforced its coinage monopoly by law in the territories of the members of the Delian League,³⁷ she did not ban the production of the Cyzicenes, even though Cyzicus was a member of the League with

³³ Kiechle, p. 99. He states explicitly "dass im 4. Jahrhundert der Grosskönig sein Monopol der Goldprägung gegenüber den griechischen Polies Kleinasiens nicht mehr aufrecht zu erhalten vermochte." There was, however, no such monopoly. Furthermore, it must be emphasized that after the "King's Peace" of 387 the powerful great kings Artaxerxes II and Artaxerxes III could have easily stopped any local coinage, if they had chosen to do so.

³⁴ Stressed by Mildenberg, "Münzwesen," chapt. 5.

³⁵ See Knauf, pp. 171–72: "Um Vielfalt und Eigenleben der ihnen anvertrauten Städte und Stämme und Völker zu pflegen, gewährten die persischen Grosskönige ihnen juristische, religiöse und kulturelle Autonomie, soweit sie mit den Interessen des Gesamtreiches vereinbar war."

³⁶ Cyzicus was not sheltered from the effects of the wars in which Persia, Athens, Sparta, and the Greek cities of Asia Minor were involved. There were, however, long decades of peace in which Cyzicus was a quiet and flourishing Persian city, as well as other shorter periods when Cyzicus was either tolerated or favored by Athens.

³⁷ See Mildenberg, "Münzwesen," n. 67, on the Athenian Coinage Decree.

a yearly tribute of nine talents.³⁸ In the mid-fifth century, Athens certainly could have forbidden the striking of Cyzicenes, but this was not in her best interest. In fact, for the Athenians, the Cyzicenes were a valuable means of payment, a sort of clearing instrument. The Persians did not think to stop the Cyzicenes; the Athenians did not want to do so.

ABBREVIATIONS

- ACGC*: C. M. Kraay, *Archaic and Classical Greek Coins* (London, 1976).
 Bogaert: R. Bogaert, "Le cours du statère de Cyzique au Vème et IVème siècles avant J.C.," *AC* 32 (1963), pp. 85-119; and "Encore le cours du statère de Cyzique au Vème et IVème siècles avant J.C.," *AC* 34 (1965), pp. 121-28.
 Bulatovich: S. A. Bulatovich, "Klad Kizikinov iz Orlovki." [A hoard of Cyzicus staters from Orlovka], *Vestnik Drevnei Istorii* 2 (1970), pp. 73-86.
Cat. Gulbenkan 2: G. K. Jenkins and M. C. Castro Hipolito, *A Catalogue of the Calouste Gulbenkan Collection of Greek Coins, Part 2* (Lisbon, 1989), Cyzicenes, 602-71.
Coin Hoards: Coin Hoards 1-7 (London, 1976-94).
 Dittenberger: W. Dittenberger, *Sylloge Inscriptionum Graecarum* (Leipzig, 1915-17).
 Eddy: M. S. K. Eddy, "The Value of the Cyzicene Stater at Athens in the Fifth Century," *ANSMN* 16 (1970), pp. 13-22.
 Furtwängler: A. Furtwängler, "Griechische Vieltypenprägung und Münzbeamte," *SNR* 61 (1982), pp. 5-25.
 Fritze, v.: H. v. Fritze, "Die Elektronprägung von Kyzikos," *Nomisma* 7 (1912), pp. 1-38.
 Gardner: P. Gardner, "Coinage of the Athenian Empire," *JHS* 33 (1913), pp. 147-88.

³⁸ The frontiers between the spheres of Persian and Greek influence were fluid, and often Cyzicus had to maneuver. However, no warlord laid hands on the mint of the Cyzicenes. Around 400 B.C., silver coins were struck in Cyzicus stating the name of the powerful Persian grandee Pharnabazos, but they conformed to the framework for the city's local silver coinage (see Mildenberg, "Münzwesen," chapt. 2, and pls. 6, 32-33, and 13, 107).

- Guépin: J. Guépin, "Le cours de Cyzicène," *AC* 34 (1965), pp. 199–203.
- Healy: J. F. Healy, "Greek White and Gold Electrum," in *Metallurgy in Numismatics* 1, ed. D. M. Metcalf and W. A. Oddy (London, 1980), pp. 194–215.
- HN: B. V. Head, *Historia Numorum* (Oxford, 1911).
- IGCH: *An Inventory of Greek Coin Hoards* (New York, 1973).
- Kiechle: F. Kiechle, "Mysien-Troas-Aiolis-Lesbos, Literaturüberblicke der griechischen Numismatik," *JNG* 10 (1960), pp. 91–164.
- Knauf: E. A. Knauf, *Die Umwelt des Alten Testaments* (Stuttgart, 1994).
- Kraay-Hirmer: C. M. Kraay and M. Hirmer, *Greek Coins* (London, 1966).
- Kunstfreund: Griechische Münzen. Aus der Sammlung eines Kunstfreundes.* Bank Leu and Münz. u. Med., Zürich, 28 May 1974.
- Laloux: M. Laloux, "La circulation des monnaies d'électrum de Cyzique," *RBN* 11 (1971), pp. 31–69.
- May: J. M. F. May, *The Coinage of Abdera, 540–345 B.C.* (London, 1966).
- Mildenberg: L. Mildenberg, "Über das Münzwesen im Reich der Achämeniden," *AM Iran* 26 (1993), pp. 55–79, pls. 6–13.
- Poenaru-Bordea: G. H. Poenaru-Bordea, 'Les régions Balkaniques et le littoral septentrional du Pont-Euxin,' *A Survey of Numismatic Research, 1978–1984* (London, 1986), pp. 87–116.
- Prinkipo: K. Regling, "Der griechische Goldschatz von Prinkipo," *ZfN* 41 (1931), pp. 1–46, pls. 1–4.
- Rouvier: D. Rouvier, "Notes techniques sur les statères de Cyzique," *SNR* 38 (1957), pp. 11–20, with figs. 1–13 on pls. 2–5.
- Shelov: D. B. Shelov, *Coinage on the Bosphorus VI–II centuries B.C.*, trans. H. B. Wells, *BAR* 46 (Oxford, 1977).
- Thompson: W. E. Thompson, "The Value of the Kyzicene Stater," *NC* 1963, pp. 1–4.
- Wade-Gerry: H. T. Wade-Gerry, "The Ratio of Silver to Gold during the Peloponnesian War: *IG* I 301," *NC* 1930, pp. 16–38 (a commentary to the British Museum stone inscription 24).
- Zograph: A. N. Zograph, "Monnaies antiques trouvées au Caucase," *Travaux du Dept. Numismatique* 1 (Leningrad, 1945), pp. 29–85 (Russian text, French summary).

Erratum: page 102.

Leo Mildenberg, "The Cyzicenes: A Reappraisal," *AJN* 5-6 (1993-94), Key to the Plates, p. 10a.

Cyzicus's Own Images

1. Hecte, mid-6th century. Tunny head l. with fish in mouth. Rev., incuse square with thick crossbars. Fritze 2. Hess-Leu 28, 219, 2.67 g.
2. Stater, ca. 500 B.C. Hercules with bow and club r., behind, large tunny. Fritze 107. Kunstfreund 6, 16.09 g.
3. Stater, ca. 500 B.C. Helmeted, winged sphinx protome l. over tunny. Fritze 71. Leu 36, 143, 16.04 g.
4. Stater, ca. 470 B.C. Winged demon holding large tunny l. Fritze 123. Leu 45, 196, 16.14 g.
5. Hecte, ca. 470 B.C. As 4. Fritze 123 and 124. NFA 5, 136, 2.69 g.
6. Stater, ca. 460 B.C. Naked warrior with Corinthian helmet, kneeling l. on large tunny. Fritze 115. Leu 42, 277, 15.87 g.
7. Stater, ca. 450 B.C. Naked Selinos kneeling r. on tunny, pours wine from amphora into cantharus. Fritze 134. Leu 42, 278, 16.00 g.
8. Stater, ca. 450 B.C. Perseus with gorgon kneeling r. on tunny, head turned back. Fritze 162. NFA 4, 250, 16.00 g.
9. Stater, ca. 390 B.C. Young Hercules and Iphicles fighting serpents on large tunny. Fritze 208. Leu 42, 280, 16.14 g.
10. Stater, ca. 350 B.C. Head of bearded man laureate, l., tunny below neck. Fritze 199. Kunstfreund 212, 16.07 g.

Imitations

11. Stater, ca. 460 B.C. Naked youth on dolphin l., holding tunny; below, another tunny. Fritze 110. Leu 50, 149, 16.14 g. A charming variation by an excellent engraver of the Tarentine model, struck around 480-470 B.C.
12. Stater, ca. 375 B.C. Head of bearded Hercules in tightly fitting lion skin headgear. Fritze 140. Hess-Leu 45, 242, 16.00 g. Conceived after the Hercules heads of the Macedonian king Amyntas, 389-369 B.C.
13. Stater, ca. 370 B.C. Kekrops with an olive branch l. on tunny. Fritze 158. Hess-Leu 31, 394, 16.00 g. An imitation of the triton-Glaucus issues of Cretan Itanos around 380 B.C.
14. Stater, ca. 400 B.C. Bearded Achelous swimming r. Fritze 174. Leu 22, 119, 16.04 g. A close imitation of the classic Gela tetradrachm struck in Sicily around 430 B.C.
15. Stater, ca. 360 B.C. Cow to l., head turned to suckling calf which kneels on tunny. Fritze 219. NFA 4, 252, 16.06 g. A skillfully engrav-

ed image of the time-honored oriental motif popular in the ancient minor arts, also appears on the coins of Dyrrachiun, Caristus, and Eretria on Euboea.

Not in Fritze

16. Stater, ca. 520 B.C. Fox biting tail of big, long tunny. Hess-Leu 45, 238, 16.25 g. Only a hemihecte was known to Fritze, 35.
17. Hecte, ca. 490 B.C. Youthful warrior in Ionian helmet l., tunny behind neck. Kunstfreund 7, 2.65 g.
18. Hecte, ca. 480 B.C. Head of Athena in Corinthian helmet to l.; behind, tunny. Leu 45, 195, 2.64 g. This is a new fine die. The stater Fritze 64 is earlier and of different conception.
19. Stater, ca. 470 B.C. Presumably rape of Thetis by Perseus; below, tunny. Leu 33, 356, 15.99 g. Known to Fritze, 109, as hecte only. "Masterly composition: the back of the tunny is formed as a domed hill and gives a tridimensional plasticity to the scene," Leu 33.
20. Hecte, ca. 370 B.C. Nike sacrificing bull; below, tunny. Leu 30, 161, 2.68 g.
21. Stater, ca. 370 B.C. Sphinx with straight wing, seated l. on tunny. Glendining 1963, 296, 15.95 g.
22. Hemihecte, ca. 360 B.C. Athena in helmet with shield and spear attacking. Leu 50, 133, 1.30 g.
23. Stater, ca. 360 B.C. Large, bearded head of old man l., tunny below neck. Ars Classica 10, 644, ex Ars Classica I (Pozzi), 2718, 16.03 g. This impressive head, a masterpiece of glyptic art, seems to be known by this large specimen only.
24. Stater, ca. 350 B.C. Head of young girl l., within disk over tunny. NFA 2, 170, 15.77 g.
25. Stater, ca. 350. Head of Artemis in corymbus r. Leu 50, 152, 15.95 g.
26. Stater, ca. 340 B.C. Lion attacking deer l.; below, tunny. Münz. u. Med. 19, 471, 15.95 g. The animal fight, a popular image in eastern, Greek, and Scythian art, appeared on Cyzicus electrum only in the late period, as shown by the Prinkipo hoard with several specimens (ZfN 41, 1931: see 138, p. 22 and pl. 3; and 139, p. 23, and pl. 3).
27. Stater, ca. 340 B.C. Dionysus seated on panther l.; below, tunny. Leu 52, 85, 15.98 g.
28. Stater, ca. 340. Youth kneeling on tunny throwing astragalus. Leu 52, 84, 15.93 g.

A 1993 HOARD OF ALEXANDER DRACHMS FROM THE NEAR EAST

(PLATES 3-6)

CHARLES A. HERSH AND HYL A. TROXELL

Early in 1993, a group of nearly 400 drachms of Alexander the Great appeared on the New York coin market. They were almost immediately dispersed, but were pursued to three different states, one quite distant. A record (written descriptions, some polaroid photographs, and a few casts) was obtained for all, thanks to the generous cooperation of several dealers.¹

¹ The authors dedicate this article to the memory of the late Margaret Thompson, to whom we and others owe so very much. She was chiefly responsible for the continuance at the American Numismatic Society of its great tradition of emphasis on the coinages of Alexander the Great, begun early in the century by Edward T. Newell. Thompson's pioneering work on the Asia Minor drachm coinages of Alexander III and Philip III, as well as her numerous studies of the hoards containing coins of these kings, set out the path for us and others to follow. She was more than a teacher: she was a friend and mentor to us both. And, as we were already in press, the sad news of Martin Price's death arrived. He too was a giant in the field of Alexander studies and he too a generous friend and mentor to each of us; we mourn for him as well as for Margaret Thompson.

Our thanks go to all who provided access, photographs, and information, whether positive or negative: Carmen Arnold-Biucchi, Harlan J. Berk, François de Callataÿ, Stephen C. Glover, Silvia M. Hurter, Jonathan K. Kern, Frank L. Kovacs, Georges Le Rider, Joseph P. Linzalone, William E. Metcalf, John Pett, Martin J. Price, Hans-Dietrich Schultz, Alan S. Walker, and David Wright.

A list of abbreviations follows the Key to Plates.

Soon a second group of almost 900 coins, a third of 85, and a fourth of nearly 50 surfaced in two other states.² Again, because of the kind help of professional numismatists, it was possible to examine these lots also. Lack of time and facilities prevented the taking of weights, but, as all of the coins must have been struck within ten years at the outside and all were in remarkably fine condition, no chronological conclusions would seem possible in any case, even had all the weights been recorded. Time did not allow a proper die study either, and the prompt dispersal of some significant coins (e.g., Magnesia 470) prevented the securing of more than a written record of them. The poor quality of many illustrations is also due to the hurried and sometimes improvised way in which some photography had to be done—but any visual record seemed better than none.

All the groups were remarkably similar in composition and all obviously derived from the same hoard. No lots contained coins of Philip III; all were in Alexander's name. Inquiries in Europe produced no reports of any other similar lots: the over 1,400 coins recorded in this country are probably all or nearly all of the find. The numismatic community, not just the present authors, owes all of these dealers a considerable debt of gratitude for making possible the publication of this large and important hoard.

Most of the hoard drachms were from the Asia Minor mints, which produced the great bulk of this denomination. Similar hoards whose provenances are unknown are usually described when published as originating in "Asia Minor?" At least one dealer, however, doubted this provenance. Also, Miletus alone provided over half of the coins in the find (ca. 53 percent) and when one realizes that this important port was surely the port of embarkation for many troops shortly after Alexander's death (when the hoard was buried), it is clear that there is no certainty that the coins were interred in Asia Minor. We therefore describe the hoard's unknown place of origin merely as "Near East 1993."

The following catalogue is the joint work of both authors. They agree on all the statements and interpretations made in the individual mint commentaries following. Troxell, however, is chiefly responsible for the work on Amphipolis and Sardes and wrote those two commentaries; the other six mint commentaries are mainly the work of Hersh and were written by him.

² There are 117 coins from lots two and three illustrated in Berk 78, 8 Sept. 1993, 78-194; and 54 more in Berk 79, 2 Nov. 1993, 105-58.

CATALOGUE

Price numbers in *italics* have been added by the present authors. Asterisks indicate issues of which at least one example is illustrated.

LF, reverse left field; TH, reverse under throne; OR, reverse outer right; B, ΒΑΣΙΛΕΩΣ

<i>Coin</i>	<i>Price</i>	<i>Markings</i>	<i>Reference</i>	<i>Total</i>	<i>Lot 1</i>	<i>Lot 2</i>	<i>Lot 3</i>	<i>Lot 4</i>
Amphipolis, 17								
			<i>Demanhur</i>					
			Groups					
* 1	81	LF cock	E	1	1			
* 2	89A	LF crescent	E	1		1		
* 3	100	LF caduceus	E	1		1		
* 4-5	-	LF laurel branch	E or F	2	2			
* 6-11	141	LF ☐	E or F	6	4	2		
* 12-17	50	LF arrow	F	6	2	4		
				17	9	8		
Macedonia ?, 4								
* 18-19	503	LF K fulmen		2	1	1		
* 20-21	503A	LF K; TH fulmen		2		2		
				4	1	3		
Lampsacus, 268								
			<i>Lampsacus</i>					
			Series					
22-28	1347	LF club	II	7	3	4		
* 29	1347A	LF club; TH Μ	II	1	1			
* 30-32	1348A	LF club; TH Κ	II	3	1	2		
* 33	1349	LF sword in scabbard	III	1	1			
* 34-36	1350	LF star	IV	3		3		
* 37-60	1352	LF Demeter	V	24	10	11	1	2
* 61	1352A	LF Demeter; TH fulmen	V	1			1	
* 62-91	1354	LF Demeter; TH Δ	V	30	6	21	2	1
* 92-289	1356	LF Demeter; TH ♂	V	198	55	133	6	4
				268	77	174	10	7
Abydos, 160								
			<i>Abydos</i>					
			Series					
* 290-92	1499	LF standing male; TH 𐀀	I	3		3		
* 293-94	1501	LF standing male; TH 𐀁	I	2		2		
* 295-303	1502	LF Hermes; TH 𐀂	I	9	4	5		
* 304-25	1503	LF Hermes; TH 𐀃	I	22	7	15		
* 326-406	1505	LF Pegasus forepart; TH 𐀄	II	81	17	59	5	
407-47	1505	LF 𐀄 Pegasus forepart	II	41	10	30	1	
* 448-49	1506A	LF Pegasus forepart 𐀄	II	2	1			1
				160	39	114	6	1

Magnesia, 21

			Thompson- Bellinger Series					
* 450	pre 1919	LF griffin (erased); TH ram head facing	1	1		1		
* 451	1919	LF ram head facing	1	1			1	
* 452	1919A	LF ram head l.	1	1	1			
453-55	1921	LF ; TH ram head facing	3	3		3		
* 456-62	1922	LF ram head l.	3	7	1	6		
463	1930	LF ram head l.	4	1	1			
* 464-66	1932	TH ram head r.	6	3	1	2		
* 467-69	1934	LF bucranium	8	3	2	1		
470	1937	LF bee l.; OR spear head	9	1	1			
				21	7	13	1	

Miletus, 755

			Miletus Series					
* 471-600	2088	LF fulmen; TH	I	130	31	84	10	5
* 601-15	2089	LF ; TH star	I	15	3	10	1	1
* 616-1200	2090	LF	I	585	148	362	51	24
* 1201-3	2090A	Obv. on lion's scalp K; LF	I	3	2	1		
* 1204-5	2092A	LF	II	2	2			
* 1206-25	2100	LF grain ear	III	20	4	16		
				755	190	473	62	30

Sardes, 170

			Sardes Series					
1226-30	2536	LF griffin head l.	IV	5	1	4		
1231	2539	LF bucranium	VI	1	1			
1232-38	2542	LF cantharus	VII	7		5	2	
* 1239-41	2547	LF head in Phrygian cap	VIII	3	1	2		
* 1242	2547A	No markings	VIII	1		1		
1243-59	2550	LF ; OR club	IX	17	4	13		
1260-1314	2553	LF ; TH rose	IX	55	17	35		3
1315-16	2555	LF rose; TH globule	IX	2		2		
* 1317	2558	LF head in Phrygian cap; TH	X	1	1			
1318	2558A	Obv. to left ; LF head in Phrygian cap	X	1	1			
1319-25	2561	OR club	X	7	3	4		
1326-27	2562	TH ; OR club	X	2	1	1		
1328-30	2563	LF bee; TH	X	3	2	1		
1331-34	2564	LF bee; TH	X	4	1	1	2	
1335-36	2565	LF torch; TH	X	2	1	1		
1337-39	2568	TH	X	3		3		
1340-42	2569	LF ; TH rose	X	3	1	2		
* 1343-44	2569A	Obv. to l. ; LF ; TH rose	X	2		2		
1345-83	2571	TH rose	X	39	12	24		3

1384	2576	LF NK bee	XI	1	1			
* 1385	2577	LF NK bee	XI	1		1		
1386	2580	LF NK; TH torch	XI	1		1		
* 1387	2594	LF Ξ bee	XIII	1		1		
1388	2595	LF Ξ bee	XIII	1	1			
* 1389-92	2597	LF Ξ	XIII	4		3		1
1393	2600	LF Ξ ; TH torch	XIII	1		1		
* 1394-95	2602	LF Ξ torch	XIII	2		2		
				<hr/>				
				170	49	110	4	7
Aradus, 4								
1396-98	3317	LF Σ ; TH Δ ; B		3	2		1	
* 1399	3333	LF caduceus; TH Δ ; B		1		1		
				<hr/>				
				4	2	1	1	
Illegible, 13³								
1400-12	?			13	7	3	1	2
				<hr/>				
				13	7	3	1	2

SUMMARY

<i>Mint</i>	<i>Total</i>	<i>Lot 1</i>	<i>Lot 2</i>	<i>Lot 3</i>	<i>Lot 4</i>
Amphipolis	17	9	8		
Macedonia ?	4	1	3		
Lampsacus	268	77	174	10	7
Abydus	160	39	114	6	1
Magnesia	21	7	13	1	
Miletus	755	190	473	62	30
Sardes	170	49	110	4	7
Aradus	4	2	1	1	
Illegible	13	7	3	1	2
<hr/>					
	1,412	381	899	85	47

The following three tables compare the contents of three Asia Minor drachm hoards: the current hoard (Near East 1993 or N.E. 1993), Asia Minor 1964 (*IGCH* 137, A.M. 1964), and Sinan Pascha (*IGCH* 1395, S.P. 1919). Table 1 is based on Thompson's work. Table 2 is based on Troxell's "Earliest Silver," and Table 3 follows Price. The Macedonia ? coins in the catalogue appear in no hoards other than Near East 1993.

³ Illegibility was not because of wear, but because markings were off flan or obscured by deposits.

TABLE 1
Hoard Appearances of Drachms as Arranged by Thompson











Lampsacus ^a					Abydus ^b				Miletus ^c			
Dates	Series, Markings	N.E. 1993	A.M. 1964	S.P. 1919	Series, Markings	N.E. 1993	A.M. 1964	S.P. 1919	Series, Markings	N.E. 1993	A.M. 1964	S.P. 1919
330/329												
329/328	I Caduceus			1								
328/327	II Club	11	2	1								
327/326	III Sword	1		2								
326/325	IV Star	3		2								
325/324	V ♂ Demeter	253	4	30	I ⚔ stdg. male or Hermes	36	8	12	I ⚔	733	10	56
324/323					II Pegasus forepart	124	20	25				
323/322	VI ⚡		4	15	III Palm tree		3	1	II ⚔ or ⚔	2	1	1
322/321					IV ⚡				III Grain ear	20		
					V ⚔			4				
321/320	VII Serpent			2	VII ⚔, star			5				
					VIII Horse's leg			2				
320/319	VIII ⚔			1	IX Grain ear			2	VII ⚔			1
319/318	IX ⚡			7	X ⚔ or ⚔				VIII W			1
318/317					XI ⚔, pentagram							

^a According to *Lampsacus* and *Abydus*, *Sardes* and *Miletus*, and Thompson-Bellinger for Magnesia. For suggested revisions, see the commentary on Magnesia and Sardes and the discussion below.

^b Abydus series VI with ⚔ is known only in gold.

^c Miletus series IV, with fulmen symbol is known only in gold; series V and VI consist entirely of tetradrachms. No coins are assigned to 318/317. The places of Magnesia and Miletus have been exchanged in this Table because of page size constraints.

Magnesia^dSardes^e

Series, Markings	N.E. 1993	A.M. 1964	S.P. 1919	Series, Markings	N.E. 1993	A.M. 1964	S.P. 1919	Dates
1 Ram head	3			IV Griffin head VI Bucranium VII Cantharus VIII Head in Phrygian cap	5 1 7 4	1 1 	3 3 	330/329
2 Griffin head, ram head								329/328
3  Ram head	10	1						328/327
4  Ram head	1							327/326
5 Bee, ram head, spearhead		10	1					326/325
6 Ram head l. or r., sometimes spearhead	3	3	2	IX 	74	1	21	325/324
7 K, spearhead			1	X 	67	4	34	324/323
8 Bucranium, spearhead	3	6	2	XI 	3	1	12	323/322
9 Bee l. or r., sometimes spearhead	1	2	27	XII 			6	322/321
10 Thyrsus			16	XIII 	9	2	29	321/320
11 Cornucopia, sometimes spearhead			4	XIV 			65	320/319
12 				XV A			7	319/318
13 			1		-	-	-	318/317

^d In order to fit the table's format, the Thompson-Bellinger dates (e.g., 330 and 325) are altered here to compound ones (e.g., 330/329 and 325/324) such as are given in *Sardes-Miletus* and *Lampsacus-Abydus*. Sinan Pascha coin totals are those of the coins in the ANS Magnesia trays. A handful of later Magnesian coins identified as from Sinan Pascha are also in the trays: presumably Thompson would have considered them intrusions (see *Sardes-Miletus*, p. 87, n. 3). The total is still considerably short of the 74 ANS coins reported in *Sardes-Miletus* (p. 87); perhaps some duplicates have been sold. The overall picture, however, should not be greatly changed.

^e Sardes series I (ram head), series II (stag head), series III (serpent), and series V (tripod) are known only in gold. No coins have been assigned to 318/317.

TABLE 2

Hoard Appearances of Drachms of Amphipolis

Dates*	Demanhur Group	Markings	N.E. 1993	A.M. 1964	S.P. 1919
325-323	E	Cock	1		
		Crescent	1		
		Bucranium	1		
		Caduceus	1		
	E or F	Laurel Branch	2		
		☐	6		1
	F	Arrow	6	1	2

TABLE 3

Hoard Appearances of Drachms of Aradus

Dates	Markings	N.E. 1993	A.M. 1964	S.P. 1919
328-320	▲			
	Σ ▲	3		3
	I ▲			1
	Caduceus. ▲	1		

* Earlier drachms, with eagle as reverse type, were found in none of these three hoards. No drachms later than group F are known.

Amphipolis, 1-17

The basic organization of the mint,⁴ a series of groups each containing several contemporary issues, was long ago given definitive form by E. T.

⁴ A forthcoming study by Troxell, *Studies in the Macedonian Coinage of Alexander the Great*, includes a section treating Alexander's small denomination silver struck at Amphipolis; research for the study underlies much of the following commentary on this mint. The traditional name of Amphipolis is retained here for the important Macedonian mint of 1-17, but without any confidence whatever that this city was the true location of that mint.

Newell in his publication of the great Demanhur hoard, buried ca. 318 B.C. The cock, crescent, and caduceus of 1–3 all are known symbols on tetradrachms of *Demanhur* group E and this is the group to which 1–3 must be attributed. Such drachm issues are extremely rare. The ANS possesses the only other caduceus drachm known to the present authors, from the obverse die of 1 and 2, but from dies other than those of 3. The obverse of 1 and 2 and this ANS caduceus drachm was also used for eagle-reverse drachms as Price 87a.

Only one of these three issues has previously been published: a cock drachm from 1's dies, which is in the Cavalla, Macedonia, ca. 1951 hoard (*IGCH* 450, 16)? The crescent drachm 2, the first such known, is a welcome addition to the Amphipolis material.

The two drachms 4 and 5, die duplicates, are also virtually new to the record. Both are illustrated: they seem to be struck from deteriorated dies, resulting in a rather "melted" appearance. Their laurel branch symbol appears at Amphipolis only on tetradrachms of Demanhur group J, the last Amphipolis group in that deposit buried ca. 318.⁵ This is too late for drachms 4 and 5, for the Near East hoard was probably interred in 322 B.C. Further, group J bears the title **ΒΑΣΙΛΕΩΣ**, lacking on 4 and 5. An obverse link exists between a Γ drachm as 6–11 and a laurel branch coin (the only other known)⁶ so that these two issues most probably belong together in one group.

It has been rather surprising to find 6–11, with Γ in the Near East hoard whose burial date seems no later than 322 B.C. The issue had been placed by Thompson in her publication of the Sinan Pascha hoard,⁷ and in Price, with the tetradrachms of the first post-Demanhur

⁵ The minute group K, placed at the end by Newell, has been thought to precede J by G. Le Rider (*Le Monnayage d'argent et d'or de Philippe II frappé en Macédoine de 359 à 294* [Paris, 1977], p. 237, n. 5) and by Thompson (*Sardes and Miletus*, p. 88, n. 90). Troxell's forthcoming study (above, n. 4) attempts to show that it was contemporary with J.

⁶ No. 3 in the Sinan Pascha 1919 hoard and a laurel branch drachm from a small hoard found in 1976 in Calim, Bulgaria, see Plate 3, A–B. Kamen Dimitrov published the Calim hoard and noted the obverse link in "Trésor monétaire hellénistique de Nicopolis ad Nestum (*IGCH* 829)," *Archaeologia* 29 (Sofia, 1988), pp. 44–56, at pp. 48, 50, and 55 (in Bulgarian, French summary).

⁷ *Sardes and Miletus*, p. 88.

hoard group, those with Γ and varying symbols. This placement seemed natural and inevitable—but now it must be recognized that these Γ drachms were struck well before the tetradrachms with this monogram. The evidence for the placement of these laurel branch and Γ coins will be suggested following the discussion of 12–17.

The drachms as 12–17, with arrow symbol (not found on any tetradrachms), were placed by Price, logically enough, with the tetradrachms of Demanhur group B, which included an issue with quiver symbol. But as all drachms accompanying groups A through D and most of those struck in group E bear the reverse type of standing eagle, such a placement is too early. The Zeus-reverse drachms first appear late in group E. Thompson in her publication of Sinan Pascha placed the arrow drachms in group F, on the basis of obverse style and a possible connection with the bow and quiver symbol known in that group.⁸

Thompson was correct and there is now good iconographical evidence to support this placement. The ever-observant E. T. Newell noted in *Reattribution*⁹ that on the tetradrachms of group F there is a sudden and short-lived change in the treatment of the exergual line. This line, hitherto virtually invariably a dotted one, now in group F is a dotted one, a simple straight line, or missing altogether. There is also occasionally found a footstool, which is sometimes indicated merely by a “short straight line (not to be confounded with an exergual line).”¹⁰ All of these variations are found on the drachms with arrow symbol, so there can be no doubt that the arrow drachms belong with group F, even though their symbol does not match any of those of the tetradrachms of that group.¹¹

The obverse-linked Γ and laurel branch issues also may well belong to group F. The sole reverse of the laurel branch coins bears a straight

⁸ *Sardes and Mileus*, p. 88.

⁹ E. T. Newell, *Reattribution of Certain Tetradrachms of Alexander the Great*, rpt. (New York, 1912).

¹⁰ *Reattribution*, pp. 16–17.

¹¹ Dotted line, Price 50; simple straight undotted line, Near East 12; no exergue line, Near East 13; the slanting line “not to be confounded with an exergual line” indicating a footstool, Near East 14.

undotted exergual line and all but one of the five reverse dies known for the Γ issue are similar (the exception is a reverse with the usual dotted line). Group E is also a possibility: Zeus-reverse drachms are known here and the very few pre-group F tetradrachms with undotted exergual lines are all in that group. Further, E introduced some experimentation in the markings on its small denomination coins. Shared obverse dies have shown that here belong the previously uncertain drachms, triobols, and diobols without symbols, but with the eagle(s) standing on a club, caduceus, or torch instead of the usual fulmen.¹² The drachms 4–11, whose markings do not repeat those of any tetradrachms, could also belong here.

Macedonia?, 18–21

Only one of these two issues (Price 503, hoard 18–19) was known to Price, who dated it 294–290 B.C. and gave it tentatively to the mint of Amphipolis because he linked it by style and the fulmen symbol to a group of tetradrachms attributed to Demetrius Poliorcetes (Price 498–502) struck at that mint during those years. The fact that four specimens of these drachms were found in the Near East hoard, buried in the 320s, negates this chronology and the reason for the attribution to Amphipolis. The two coins of each issue are struck from a single reverse die and both of the two known obverses are used for each issue (19, not illustrated, is from the reverse of 18 and the obverse of 21).

The obverses of this small group of coins have a style unlike any drachms struck at Amphipolis or at the prolific Asia Minor drachm mints. Bearing in mind that these coins were issued in the 320s and look unlike any other published drachms from their period, it is possible that they might come from another Macedonian mint that struck no other drachms save these.

No coins as 18–21 appeared in either the Asia Minor 1964 or Sinan Pascha hoard.

Lampsacus, 22–289

Even though there are three issues unpublished by Price among the nine from Lampsacus found in the Near East hoard, the order of the

¹² Price 144–57: see chapter 2 in Troxell, forthcoming (above n. 4).

coins as arranged by Thompson and Price is not changed by the new drachms from this find. The new issues 1347A (29, LF club; TH M and 1348A (30–32, LF club; TH K) are both linked to known obverses of Price 1347 (22–28, LF club) although not to each other.¹³ Price issue 1349 (33, LF sword) is also linked to issue 1347.¹⁴

The other new issue in this hoard, Price 1352A (61, LF Demeter; TH fulmen) is obverse linked to issue 1352 (37–60, LF Demeter), being from the obverse die of *Lampsacus* 44.

The Lampsacene sequence in the hoard ends with the very large Price 1356 drachm issue from this same series (the 198 coins 92–289, LF Demeter; TH ♂). *Lampsacus*'s tetradrachm issue 1355, with the same markings, was the largest tetradrachm issue of any of these Asia Minor mints at this period.

Abydus, 290–449

The coins from the Near East hoard have not changed the arrangement of the early issues of this mint as found in Price and in *Lampsacus and Abydus*. In these early groups of Abydus in the hoard, there is only one new issue variant: Price 1506A (448–49, LF Pegasus forepart over ♂, a variation of the common issue 1506 (LF ♂ over Pegasus forepart). Hoard coin 448 is from the obverse die of *Abydus* 37, from Price 1505 (LF Pegasus forepart; TH ♂), also a relatively common issue.

The hoard coins enable us, however, to verify a correction of *Lampsacus and Abydus* which was originally made by Price (1496–1501). Thompson in *Lampsacus and Abydus* described gold staters 1 and 2, tetradrachms 3–7, and drachms 8–29 as all having a figure of Hermes in the left field. In fact, all of the staters and tetradrachms, as well as drachms 8, 14, 16, 27, and 28 clearly show a bare-headed male figure standing to the left, wearing a chlamys and with his empty right hand extended. The balance of the drachms in *Lampsacus and Abydus* show Hermes in the left field, standing left wearing a petasus and holding a caduceus in his extended right hand (see Plate 4, 290 and 293 [standing male] and 295 and 304 [Hermes]).

¹³ 1347A is from the obverse die of *Lampsacus* 7; 1348A from that of *Lampsacus* 6.

¹⁴ *Lampsacus* 9 (1347) and 10 (1349).

Magnesia, 450–70

For the provisional structuring of the early drachm coinage at Magnesia, we have in general utilized the arrangement as presented in Thompson-Bellinger, augmented by material available at the ANS: coins, photographs, casts, and some of Margaret Thompson's notes and photos used in the preparation of Thompson-Bellinger. Why we feel this arrangement is superior to Price's will be indicated presently.

The quantity of drachms issued from the Magnesians mint was quite small at the start of production, as evidenced by the great amount of interlinking of obverse dies between series, through series 8. It is only with series 9 and 10 that there was a very sizeable increase in the quantity of silver struck, and many more obverse dies were utilized for each series with a consequent major reduction in inter-series obverse die links.

The most serious drawback to Price's sequence for the coins of this mint was his placement of the drachms of Thompson-Bellinger series 5 (1940–41) following series 9 (1936–39), instead of after series 4 (1930–31). No obverse die of the early series is linked to reverses beyond series 9, when the production of silver at this mint expanded so greatly. It would be useful here to differentiate between the issues of series 1 and series 6, both marked only with a ram head, as Thompson-Bellinger did not show exactly what these two series contained and Price is rather incomplete.

Series 1

- a) TH ram head facing (Plate 4, 450, not in Price, but would be Price *pre-1919*)
- b) LF ram head facing (Plate 4, 451, Price 1919)
- c) LF ram head right (Plate 5, 2.1c, not in Price, but would be Price *1917A*)
- d) LF ram head left (Plate 4, 452, not in Price, but would be *1919A*)








Series 6

- a) TH ram head right (Plate 4, 465, Price 1932)
- b) TH ram head left; OR spearhead (Plate 6, 6.6b, not in Price, but would be Price *1932A*)

A spearhead in the outer right field also occurred in series 5 and in series 7-9.

As noted previously, the number of drachms issued at Magnesia was small for series 1 through 8 and very few obverse dies were used. There was much sharing of obverse dies between series as Table 4 and Plates 5 and 6 illustrate.

TABLE 4
Obverse Die Links within Series 1 to 9

<i>Link.</i>	<i>Rev. of Series</i>	<i>Price</i>	<i>Description and Comments</i>
1	2	1926	LF griffin seated left; TH ram head facing
	1a	<i>pre-1919</i>	Die of previous coin, but with griffin erased
	1b	1919	LF ram head facing
	8a	1934	LF bucranium
2	1c	<i>1917A</i>	LF ram head right
	1d	<i>1919A</i>	LF ram head left
	3	<i>1922A</i>	LF  ; TH ram head left
	4	1931	LF  ; TH ram head left
3	2	1927	LF griffin seated left; TH ram head right
	3	1922	LF ram head left over 
	4	1930	LF ram head left over 
	5	1940	LF bee; TH ram head left; OR spearhead
	6a	1932	TH ram head right
	8a	1934	LF bucranium
4	3	<i>1922A</i>	LF  ; TH ram head left
	4	1931	LF  ; TH ram head left
5	3	1922	LF ram head left over 
	5	1940	LF bee; TH ram head left; OR spearhead
	6a	1932	TH ram head right
6	5	1940	LF bee; TH ram head left; OR spearhead
	6a	1932	TH ram head right
	6b	<i>1932A</i>	TH ram head left; OR spearhead
7	7	1933	TH K; OR spearhead
	8b	1935	LF bucranium; OR spearhead
8	8b	1935	LF bucranium OR spearhead
	9	1939	LF bee; OR spearhead

These obverse-linked groups of drachms seem at first to connect series 1 through 9. The first and third linkages, however, may not be what they seem, because Thompson-Bellinger's series 8 appears in fact to be two different groupings:

8a: LF bucranium (Price 1934), and

8b: LF bucranium; OR spearhead (Price 1935).

Series 8a was not known to Thompson when Thompson-Bellinger was written and it was not until five coins of 8a, all from the same obverse die, appeared in the Asia Minor 1964 hoard (68–72) that it was recorded by her. Another three examples were included in Near East 1993: one, 467, from the obverse used for the Asia Minor 1964 hoard pieces, the other two from two different obverse dies. These obverses of series 8a are much closer in style to series 5 and 6 than to series 8b or to series 7 and 9. This hoard contained no pieces of 8b.

The proposed rearrangement is to consider 8a a separate series, placing it just before or just after series 5. This would leave series 1 through 6, including the reclassified 8a, firmly die linked together, with the remaining series (7, 8b, and 9) in a separate linked group. All of the coins in the latter group would have a spearhead in the outer right field, another indication of a relationship between these issues. Although Philip III's coins at Magnesia begin in series 9, none were present either in Near East 1993 or in the 1964 Asia Minor find.

Another interesting discovery concerning the early arrangement of the drachms of Magnesia was that hoard coin 450 of series 1 (Price *pre-1919*: TH ram head facing) was from the same pair of dies as a coin of series 2 (Price 1926: LF griffin seated left; TH ram head facing) (see Plate 5, 1.2), but with the griffin erased from the reverse die. Clearly series 2 preceded series 1 and Price 1924–27 should be placed before Price 1917–23.

If indeed the early series at Magnesia were all consecutive and none parallel in their issuance, the resultant arrangement would appear to be as follows: 2, 1, 3, 4, 8a, 5, 6, 7, 8b, and 9. See, however, the comments on Magnesia in the discussion at the end of this article.

Miletus, 471–1225

The coins from this mint consist of just six different issues, four of which are present in significant numbers and together represent more than 53 percent of the 1,412 drachms in the find. One issue alone (Price

2090) consisted of 585 coins and constitutes over 41 percent of the total present, without even taking into account the three additional pieces of the very rare variety of this issue (2090A) with a K on the lion's scalp of the obverse die.

There is only one new Miletus issue in the hoard, 1204–5, unknown to Price and Thompson. That would be Price 2092A with Γ in left field. The two hoard coins, die duplicates, are the only silver known of *Miletus* series II, which had hitherto been known only from gold staters (Price 2092 and 2093). The issue does not obverse die link to those immediately preceding (2088–91) or following (2100). Its obverse die actually is quite unlike any other known in the whole Alexander drachm coinage, as the hairs on the mane of the lion scalp are represented by long, stringy lines hanging down from the lion skin, rather than the normal curls or tufts found on other dies. However, the early drachms struck at Miletus show a wide range of mane hair representations, so this does not appear too far out of line.

Sardes, 1226–1395

Two new varieties unknown to Price surfaced in this hoard. The first, 1242, Price 2547A, has no symbol, but is from the obverse die of hoard coin 1239, Price 2547. The second, 1387, Price 2594, is a new variant in *Sardes* series XIII. More importantly, the number of *Sardes*'s issues and varieties in the hoard were more than three times those from any other Asia Minor mint and they also presented the most serious arrangement problem to the cataloguers.

Sardes's series I through VI consist almost entirely of gold, although a few drachms are known in IV and a number of drachms and tetradrachms in VI. The gold of these series is extensively and intricately die linked and as Thompson says, "Clearly some at least of the symbols must have been employed concurrently."¹⁵ A very few drachms are again known in VII and VIII, but serious production starts only in the following series. There is one small disquieting detail: *Sardes* drachms 47–48 (series VIII, obverse of 47 linked to VII's 43) for the first time portray a Zeus with crossed legs, although Zeus with crossed legs does not reappear at *Sardes* for some time.

¹⁵ *Sardes and Miletus*, p. 10.

Drachms with symbol head in Phrygian cap ("Mithras Head") were placed by Thompson in both series VIII and X, the division made by stylistic considerations. She did not note the monogram \mathfrak{M} present on the obverse of series X's *Sardes* 98–99 (as 1318), which ironically made that placement quite correct. *Sardes* 100–101 (as 1239–41), however, without the monogram, would appear to belong to series VIII—which is exactly where Price placed them (2547).

But there are two more serious problems with the hoard's *Sardes* component. First are the Thompson dates for the latest series of Lampsacus, Abydus, Miletus, and Magnesia contained in the hoard.

Lampsacus series V ca. 325–323 (37–289)

Abydus series II ca. 324/3 (326–449)

Miletus series III ca. 323/2 (1206–25)

Magnesia series 9 ca. 322 (470)

The latest *Sardes* coins, however, were 1387–95 of series XIII, dated by Thompson to ca. 321/20. Four of the five mints (all but Miletus) continued to issue drachms after the closing series given above, so the absence in this hoard of succeeding series is significant. As but a handful of hoard coins of the first four mints are dated as late as 322, it seems most unlikely that *Sardes* series XIII has been dated correctly; one must assume on the basis of the hoard evidence that it was issued earlier than 321/20.

The second question raised by the hoard's *Sardes* coins concerns the absence there of *Sardes* series XII, placed by Thompson before XIII. Thompson's series XII was a large one.¹⁶ It was lacking in the smaller Asia Minor 1964 hoard, which like Near East 1993 included series XIII, and its absence also in this large deposit almost certainly indicates that it was not yet in circulation when those two deposits were interred.

¹⁶ Series XII has the lowest coin/obverse die ratio (31 coins, 20 dies, *Sardes and Miletus*, p. 40) of any series except VIII (3 coins, 3 dies). Hence the number of XII's obverse dies was probably proportionately higher than would appear from the dies known to Thompson and listed above. One of the present authors (Hersh), who has followed the coin market closely for decades, also observes that series XII is a very common one.

TABLE 5

Thompson's Summary of the Sardes Coinage, Series I-XV
Obverse Dies Known and Obverse Links

			Stater Dies ^a	Tetra- dr. Dies	Drachm Dies
330- 325	I ^b Ram head	many links	2		
	II Stag head		3		
	III Serpent		10		
	IV Griffin head		7		1
	V Tripod		6		
	VI Bucranium		5	1	1
	VII Cantharus				[4
	VIII Head in Phrygian cap 2.			1	3
325/4	IX		1	1	[19
324/3	X		2		[43
323/2	XI		[1		[24
322/1	XII		[3		[20 Philip III
321/20	XIII		? [5		[36 Philip III
320/19	XIV TI		[12	11	[50 Philip III; ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ (on gold)
319/8	XV A		[8	6	[46 Philip III; ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ (on gold)

^a The numbers of gold stater dies are those in *Sardes and Miletus*, p. 40, less the three dies used in series IV and V for fractional gold and the one employed in XIII for a distater. The remaining total for gold in the summary for Sardes I-VIII (35) is misleading as the fourteen stater obverse links reduce the total stater dies used in I through VIII to 21.

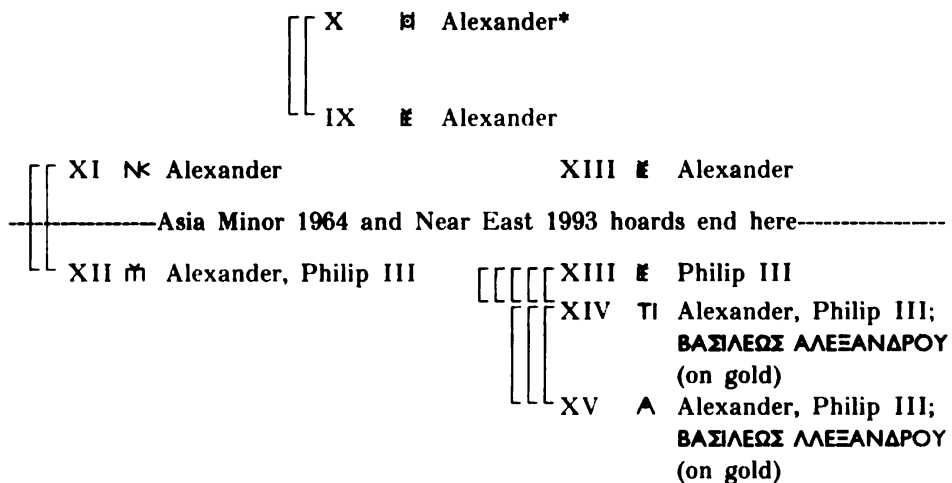
^b All of the series are struck in the name of Alexander, but XII through XV also employ the name of Philip III. The title ΒΑΣΙΛΕΩΣ is used only on the gold of series XIV and XV, and there only with ΑΛΕΞΑΝΔΡΟΥ.

Series XIV and XV, with Philip III's name and also ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ, must be the latest series, and of course they are not in either Asia Minor 1964 or this hoard. Series XII and XIII, also employing Philip's name, must be next-to-last. Series XII is die linked to the preceding XI, while XIII is linked to the following XIV and XV. One might first think of explaining the hoard evidence simply

by reversing the positions of XII and XIII, but this die linkage makes a reversal impossible—at least in a linear series. A non-linear arrangement, however, would solve all problems.

In Table 6, such a rearrangement is diagrammed. The division of XIII into two successive portions, one with Alexander's name and one with Philip's, seems justified by the following considerations. 1) In the other three series employing both Alexander's and Philip's name (XII, XIV, XV) shared obverse dies connect coins in the two names; no such die links are known in XIII. 2) With one exception (*Sardes* 204), every Alexander coin in XIII depicts Zeus with parallel legs and every Philip coin has Zeus with his legs crossed. This is true not only of the coins illustrated in *Sardes and Miletus*, but of all examples (coins, casts, and photographs) at the ANS. 3) All of the five die links between XIII and XIV involve coins in Philip's name. Drachms with XIII's Ξ and XIV's TI together on the same reverse dies (*Sardes* 211–14) are also all in Philip's name. 4) Finally, of course, no coins of XIII in Philip's name appear in either Asia Minor 1964 or Near East 1993. The conclusion that the Philip coins of series XIII all followed those of that series in Alexander's name seems inescapable.

TABLE 6
Rearrangement of Sardes Series IX–XV



* X and IX may also be parallel issues.

There seems no real reason to place IX before X—and in any case the two series, as is suggested for XII–XV, may well be parallel instead of successive. A number of satisfactory developments arise from this rearrangement of an unusually complex and confusing mint. 1) Series X's secondary symbol of head in Phrygian cap ("Mithras Head") now follows directly on the same symbol in VIII, where it is the primary marking. 2) Series XI succeeds IX directly: note the known recutting of \aleph over \aleph .¹⁷ 3) The two \aleph series, IX and XIII, are now contiguous and might even be considered one series. 4) Series XII's \aleph , if, as it seems, a variant of \aleph , is more logically placed here following rather than sandwiched between the two series IX and XIII with \aleph . 5) There is also the happy result that Sardes's single distater issue (series XIII's 174, in the name of Alexander) may be contemporary with Miletus's unique such issue (there series I, 20), dated to ca. 325/4–324/3 by Thompson. Price, although he follows Thompson's dating for Sardes in his catalogue in placing series XII and XIII after 323 B.C., says in his Sardes introduction that "The unusual issue of a distater . . . coincides with that at Miletus . . . and a date c. 325/4 may be given to it. Its purpose was no doubt connected with the returning veterans of Alexander's army."¹⁸ 6) Finally, this arrangement explains the hoard evidence, with its lack of both series XII and of any coins in Philip III's name.

Such a rearrangement would account for the lack of Sardes series XII in both Asia Minor 1964 and the present hoard. It also solves the apparent problem presented by the late date of ca. 321/20 assigned by Thompson to series XIII. That series must have been at least partially produced (i.e., only the earlier portion with Alexander's name) by the time of Near East's burial, perhaps in 322, as will be suggested in the concluding commentary.

Aradus, 1396-1399

Aradus's drachms (1396-1399) are the only four in the find from a Phoenician mint and the only ones there bearing the royal title **ΒΑΣΙΛΕΥΣ**. Unfortunately they cannot be very closely dated, but the accepted dating of these pieces to ca. 328–320 B.C. does not create any problems.

¹⁷ *Sardes* 122.

¹⁸ Price, p. 320.

BURIAL DATE

The authors suggest a burial date of ca. 322 B.C. for the Near East 1993 hoard. This interment date is just slightly earlier, perhaps less than a year, than that of the Asia Minor 1964 hoard. The extreme similarity of the two deposits' contents can be seen in Table 1 on p. 18–19 above. The implications about the burial date of Near East 1993 based on the coins of other mints are discussed below.

Amphipolis

Newell in *Demanhur* dated the latest group present, group F, to ca. 326 B.C.¹⁹ More recently, Troxell has considered it struck ca. 323 B.C., just before Alexander's death and the institution of the joint kingship of Philip III Arrhidaeus and the young Alexander IV.²⁰ But, since Amphipolis struck no drachms following group F, that group's date is not significant.

Macedonia ?

No evidence exists for the date of these rare coins except their presence in this hoard.

Lampsacus

Hoard evidence suggests that the Asia Minor staters of Philip II's types commenced only after Alexander's death in 323. The latest series of Lampsacus, Abydus, and Magnesia present in Asia Minor 1964 were, in each case, the earliest which included staters of Philip II's types. In addition the Magnesia series also included coins of Philip III. In Near East 1993 the Lampsacus and Abydus coins come down only to their respective series just before those in Asia Minor 1964; but Near East 1993's Magnesia coins end with the same series as Asia Minor 1964's.²¹

¹⁹ *Demanhur*, p. 26.

²⁰ "Earliest Silver," pp. 60–61; see also the forthcoming study in n. 4 above.

²¹ See Table 1, p. 18–19. The earliest Philip II staters at Asia Minor mints are *Lampsacus* VI, 109–26; *Abydus* III, 61–62, and IV, 70–75; and *Magnesia*, Thompson-Bellinger, p. 23, series 9, which also includes Philip III. See below for discussion of the questionable placement of the Philip II staters with ⸥ at Miletus.

No Philip II staters seem earlier than those associated with Philip III, and cannot antedate the very end of 323. Series VI of Lampsacus, whose drachms were present in Asia Minor 1964 but not in Near East 1993, was the first at that mint to include staters. Thompson thus dated series VI to ca. 323/2–322/1, with this hoard's latest series, V, immediately preceding, dated to ca. 325/4–324/3.

Abydus

A stater of Abydus group I is from the obverse of a stater of Lampsacus's group V, dated ca. 325/4–324/3.²² Thompson thus dated Abydus series I to ca. 325/4 and series II (the latest in Near East) to ca. 324/3. The next series, as at Lampsacus, was the first to contain staters of Philip II. Again, drachms of this next group, III, as well as of the following one, IV, were present in the Asia Minor 1964 hoard, although not in Near East.

Magnesia

For Magnesia we have, of course, Thompson's arrangement only in her 1955 article (Thompson-Bellinger), where the links make the arrangement clear around the time of Alexander's death. The first series to include Philip II staters (and also coins with Philip III's name) is series 9, the latest series present in both Asia Minor 1964 and Near East 1993. No coins of Philip III were present, however, in either deposit. Asia Minor 1964 contained two examples of series 9 Alexanders; this hoard one (470). Thompson-Bellinger dates its issue to 322.²³

Miletus

Miletus struck no coins in the name of Philip III, so we are deprived of that valuable chronological peg. *Miletus* 22–23, the only Philip II staters given to Miletus, bear the monogram Φ . Thompson placed these at Miletus in series I because of the monogram's strong similarity to I's Φ . The very large series I thus was dated to ca. 325/4–323/2; the Philip II staters of course would be dated no earlier than late 323, after the joint kingship was established.

²² *Abydus* 1; *Lampsacus* 88.

²³ Thompson-Bellinger, p. 23.

Price, however, has questioned the Milesian origin of these Philip II staters, one of whose obverse dies was used for a stater of Magnesia series 9. He notes that the monograms are not indeed identical and states that "Since [an] obverse die of that issue is also used at Magnesia, it seems unwise to assume that it belongs to this [Miletus] mint."²⁴ The dating of the extremely large series I at Miletus to ca. 325/4–323/2 thus rests on rather unsatisfactory grounds, although the hoard evidence is in agreement with such a date.

Series III, also present in Near East as well as in Asia Minor 1964, is dated by Thompson to ca. 323/2, along with series II, whose only known silver is the two drachms in Near East (1204 and 1205). There is no strong connection between these series and series I and in any case no drachms were struck in Thompson's succeeding series IV–VI. Miletus does not help establish Near East's burial date.

Sardes

The revised arrangement proposed above for this mint negates Thompson's date for series XIII, which she considered the second to bear Philip III's name and accordingly assigned to ca. 321/20. In Troxell's revision given earlier in this article, series XIII spanned the period just before and just after Philip III's assumption of the joint kingship. Near East's Sardes coins of series XIII, none of which bear his name, would date from very late 323 at the earliest.

Aradus

These drachms cannot be precisely dated, but as noted above provide no problem in dating Near East's interment to ca. 322.

Colophon

No coins of Colophon, probably the latest major Asia Minor drachm mint to open, were present in Near East 1993, but the mint is mentioned because Asia Minor 1964 did contain one example of its opening series—another indication that Near East may have been buried very slightly earlier.

The latest coins in the hoard thus have been assigned to ca. 322 and, as the deposit contained not one coin of Philip III, a burial date of ca.

²⁴ Price, p. 276.

322 B.C. seems most probable. As its Lampsacus and Abydus components ended before those in Asia Minor 1964 and as Asia Minor 1964 contained one early Colophon drachm, whereas Near East contained none, it seems to have been interred slightly before Asia Minor 1964. The Near East 1993 hoard is therefore the earliest Alexander drachm hoard known and is among the earliest of all Alexander hoards recorded.

DISCUSSION

As is not surprising for a hoard of its size, Near East 1993 has produced a number of new issues and varieties. They are found here in every mint in the hoard save Aradus: Amphipolis's coins 2, 4, and 5; Macedonia's 20 and 21; Lampsacus's 29, 30–32, and 61; Abydus's 448 and 449; Magnesia's 450 and 452; Miletus's 1204 and 1205; and Sardes's 1242 and 1387. All of these new issues, however, can be securely placed in context and make no changes in attributions or dating.

The hoard has also necessitated a rather surprising new date for the rare Amphipolis drachms 6–11. As discussed in the Amphipolis commentary above, they have previously (and very reasonably) been thought to be connected with a group of tetradrachms issued several years after this hoard's burial.²⁵ The Γ drachms must now be disassociated from those larger coins and recognized as earlier.

Strikings of Colophon and Teos (this latter is somewhat tenuous as a mint) were completely absent from this large hoard and the conclusion must be that they can have commenced operation only ca. 322 B.C. or later.

Most significant, however, is the opportunity the hoard supplies to re-examine the strikings of the Asia Minor mints. Thompson's arrangements of five mints' activities are shown in the Table on p. 18–19. The rigid year-by-year arrangement presented for all the mints in Thompson-Bellinger is all we have of her thinking for Magnesia and that is what is shown on the table for that mint. Price has, however, wisely cautioned that "It is important to warn . . . against looking to date the

²⁵ The tetradrachms with Γ and varying secondary markings (Price 128–40). These are the first post-Demanhur group and thus can have been struck no earlier than ca. 318 B.C., years later than the Near East hoard's burial.

issues of drachmae too closely. Thompson and Bellinger threw together varieties to create 'annual' issues which cannot now be accepted."²⁶ Presumably Thompson would have modified this arrangement had she lived to complete the projected third volume of her *Alexander's Drachm Mints*, just as the further study which lay behind her first two volumes led to alterations in the Thompson-Bellinger arrangements of the four mints published there.

The present authors also question the validity of necessarily assuming that all of the series at a given mint must have been struck in a linear fashion, one series succeeding another in an orderly manner. Thompson herself allowed this for the early gold of Sardes: "Clearly at least some of the symbols must have been employed concurrently."²⁷ Troxell's rearrangement of Sardes series IX–XV (see Sardes commentary above) attempts to show that some silver series there also were at least in part contemporary. This rearrangement seems to fit the current evidence better than does a linear sequence of series.

For Magnesia, too, Price has radically differed from Thompson-Bellinger's early chronology, saying of the series before 323 (1–8) that "although they provided an abundant coinage, with their limited number of symbols and monograms, and with close die-linking between varieties, they probably reflect an intense period of minting over a short period."²⁸ He also adduces the exceptional use of a symbol below Athena's neck on the staters of Magnesia and those of Miletus of its series I (Miletus's large concentrated coinage struck just before and after Alexander's death). This parallelism seems to support his contention that "There appears to be no reason to place the beginning of the Alexander coinage at Magnesia before c. 325 B.C."

The present authors agree with this dating of Magnesia series 1–8 to ca. 325/4 and 324/3 and can add to Price's arguments that the drachm coinage of series 1–8 does not appear to have been at all "abundant." We have been able to discover only thirteen obverse dies used for 1–6 (including 8a, see the discussion on Magnesia above for the division of 8

²⁶ Price, p. 209.

²⁷ *Lampsacus and Abydus*, p. 10. At the time of publication of "Philip II Staters" Thompson had not yet placed these gold issues at Sardes.

²⁸ Price, p. 264.

into 8a and 8b) and another five for 7 and 8b. These are quite small numbers when compared to those known to Thompson at other mints in this period. The small series 1 through 6, as shown by the complex die links presented in the Magnesia commentary above, must, like those at Sardes, also have been at least in part concurrent.

With Abydos, Magnesia, and Miletus all now seemingly commencing operations only ca. 325, is it necessary to assume that Lampsacus and Sardes started as early as 330? Their large issues may have been struck only from 325 on, but smaller issues, chiefly of gold, have been assigned to them some years earlier (although not die linked to those commencing ca. 325). It is not impossible that their earliest issues appeared by 330, and Sidon, of course, produced firmly dated Alexanders from 333/2 on. If we no longer think in terms of annual issues, all depends on the time needed for these small issues prior to 325—and that is impossible to judge in the context of our present knowledge.

Returning to our dedication to Margaret Thompson, we regret greatly that she did not see this hoard. She would undoubtedly have gleaned more from it than we have. What she deduced from the nearly contemporary smaller Asia Minor 1964 deposit (88 coins), however, is virtually all that could have been learned from Near East had it appeared first. The present hoard adds relatively little to what that great scholar extracted from so much less evidence.

KEY TO PLATES

<i>Coin Number</i>	<i>Price Number^a</i>	<i>Provenance^b</i>
Plate 3		
<i>Amphipolis</i>		
[1	81	Hersh
2	89A	Hersh
3	100	Hersh
[4]	—	Hersh
5]	“	Private collection

^a Price numbers in italics have been added by the present authors.

^b Berk is Berk 78, 8 Sept. 1993.

[A	“	Blagoevgrad ex Calim 1976 hoard (see n. 16)
	B	141	ANS = Sinan Pascha hoard 3
	6	“	In commerce
	12	50	Berk 79
	13	“	In commerce
	14	“	In commerce

Macedonia?

[18	503	Berk 82
	20	503A	Hersh
	21	”	Berk 83

Lampsacus

29	1347A	Hersh
30	1348A	Hersh
33	1349	In commerce
34	1350	Hersh
37	1352	Hersh
61	1352A	Hersh
62	1354	Hersh
92	1356	Berk 106

Plate 4

Abydus

290	1499	Hersh
293	1501	Hersh
295	1502	Berk 110
304	1503	Berk 114
326	1505	Berk 119
448	1506A	Hersh

Magnesia

450	pre1919	Hersh
451	1919	Hersh
452	1919A	In commerce
457	1922	Berk 129
465	1932	Berk 130
467	1934	In commerce

Miletus

471	2088	Berk 135
601	2089	Hersh
616	2090	In commerce
1201	2090A	In commerce
1204	2092A	Hersh
1206	2100	Berk 153

Plate 5

Sardes

1239	2547	Hersh
1240	"	Hersh
1242	2547A	In commerce
1317	2558	Hersh
1343	2569A	Hersh
1385	2577	Berk 186
1387	2594	In commerce
1389	2597	Berk 190
1394	2602	Berk 191

Aradus

1399	3333	In commerce
------	------	-------------

Magnesia

[1. 2]	1926	Hersh
[1. 1a]	<i>pre1919</i>	Hersh = Near East 450
[1. 1b]	1919	Hersh = Near East 451
[1. 8a]	1934	Hersh = Asia Minor 1964 hoard 70
[2. 1c]	1917A	ANS ex Sinan Pascha hoard
[2. 1d]	1919A	Near East 452
[2. 3]	1922A	Glasgow = <i>Hunter</i> , p. 320, 225
[2. 4]	1931	Gotha 9

Plate 6

[3. 2]	1927	Athens
[3. 3]	1922	Near East 457 = Berk 129
[3. 4]	1930	London
[3. 5]	1940	ANS ex Newell
[3. 6a]	1932	Near East 464
[3. 8a]	1934	Near East 469

[4. 3	1922A	ANS ex Cavalla hoard
[4. 4	1931	ANS ex Armenak hoard
[5. 3	1922	Near East 456
[5. 5	1940	Asia Minor 1964 hoard 60
[5. 6a	1932	Hersh = Asia Minor 1964 hoard 65
[6. 5	1940	ANS = <i>SNGBerry</i> 244, ex Petsalis
[6. 6a	1932	London
[6. 6b	1932A	Petsalis
[7. 7	1933	ANS ex Sinan Pascha hoard
[7. 8b	1935	ANS ex Newell
[8. 8b	1935	Hersh = Asia Minor 1964 hoard 73
[8. 9	1939	ANS ex Larissa hoard

ABBREVIATIONS

The three major sources for the mints discussed in this article are Margaret Thompson's two works on the drachm mints of Alexander and Martin Price's recently published book on the coinage of Alexander. For the Asia Minor mints, we have used the names traditionally ascribed, although more or less uncertainty surrounds several of these attributions.

Sardes, Miletus, or Asia Minor 1964 M. Thompson, *Alexander's Drachm Mints I: Sardes and Miletus*, ANSNS 16 (1983), where references are to the respective mints' die numbers or to the Asia Minor 1964 hoard (A.M. 1964), pp. 81–85.

Abydus or Lampsacus M. Thompson, *Alexander's Drachm Mints II: Lampsacus and Abydus*, ANSNS 19 (1991), where references are to the respective mints' die numbers.

Price M. J. Price, *The Coinage in the Name of Alexander the Great and Philip Arrhidaeus: A British Museum Catalogue* (Zurich and London, 1991), where references are to die numbers.

Other publications cited in the article are abbreviated as follows.

Armenak Armenak 1927 Hoard (IGCH 1423), M. Thompson, "The Armenak Hoard (IGCH 1423)," *ANSMN* 31 (1986), pp. 63–106. The fourth-century strikings of the Asia Minor mints are not individually listed, but are identified in the ANS trays.

- Cavalla Cavalla 1951 hoard (*IGCH* 450), M. Thompson, "The Cavalla Hoard (*IGCG* 450)," *ANSMN* 26 (1981), pp. 33–49. The fourth-century strikings of the Asia Minor mints are not individually listed, but are identified in the ANS trays.
- Demanhur E. T. Newell, *Alexander Hoards II: Demanhur 1905*, ANSNM 19 (1923).
- "Earliest Silver" H. A. Troxell, "Alexander's Earliest Macedonian Silver," *Mnemata: Papers in Memory of Nancy M. Waggoner*, ed. W. E. Metcalf (New York, 1991), pp. 49–61.
- Hunter G. Macdonald, *Catalogue of Greek Coins in the Hunterian Collection* 1 (Glasgow, 1899).
- Larissa Larissa Environs 1937–1938 hoard (*IGCH* 168)
- Near East Near East 1993 hoard (N.E. 1993), this article.
- Petsalis Former collection of Dr. Petsalis, Athens.
- "Philip II Staters" M. Thompson, "Posthumous Philip II Staters of Asia Minor," *Studia Paulo Naster Oblata I. Numismatica Antiqua*, ed. S. Scheers (Louvain, 1982), pp. 57–61.
- Sinan Pascha Sinan Pascha ca. 1919 hoard (*IGCH* 1395, S.P. 1919), partially published in *Sardes and Miletus*, pp. 86–89.
- SNGBerry *Sylloge Nummorum Graecorum. The Burton Y. Berry Collection* (New York, 1961).
- Thompson-Bellinger M. Thompson and A. R. Bellinger, "Greek Coins in the Yale Collection, 4: A Hoard of Alexander Drachms," *Yale Classical Studies* 14 (1955), pp. 3–45.

FOUR SELEUCID NOTES

(PLATES 7–8)

**DIMITAR DRAGANOV, ARTHUR HOUGHTON,
AND WAYNE MOORE**

The notes are arranged chronologically.

1. A New Bronze Issue of Antiochus II of Sardes (D. D.)
2. The Chronology of the Later Coinage of Demetrius I at Ecbatana (A. H.)
3. The **ΕΥΠΙΑΤΡΕΩΝ** Coinage of Alexander I Balas (W. M.)
4. Countermarks of Tryphon: Comments on the Circulation of Currency in Northern Syria, ca. 150–140 B.C. (A. H.)

1. A NEW BRONZE ISSUE OF ANTIOCHUS II OF SARDES

DIMITAR DRAGANOV

The following two coins were found in the ruins of Cabyle, a short distance from Yambol, Bulgaria.¹

¹ The hellenistic city of Cabyle is located on the Tonzos (present-day Toundzha) River, at its greatest bend 6 km north of Yambol. Mentioned first by Demosthenes (*Olynthiac Orations* 8.44), and later by other classical authors (Theopompus fr. 220; Anaximenes fr. 12; Polybius 13.10.10; Strabo 7.6.2, etc.), Cabyle was the only interior Thracian city to have a mint that struck autonomous bronze coins and late posthumous Alexander tetradrachms. Cabyle also produced tetradrachms for the Celtic king

Obv. Laureate head of Apollo r.

Rev. ΒΑΣΙ to l.; ΑΝΤΙ to r., upward; inverted anchor; to l., monogram.

- 1 0.92 Rev. monogram is partly off flan. Museum of History, Yambol. From Cabyle.² Plate 7, 1.
2. 0.90 Rev. monogram appears to be Μ. Museum of History, Yambol. From Cabyle. Plate 7, 2.

The above issue does not appear in *ESM*, *WSM*, or published collections, including *CSE*.³ Indeed, the combination head of Apollo/anchor does not seem to be known within the corpus of recorded Seleucid coins and can therefore be considered to be new to Seleucid typology. The principal questions about the two coins are where and during the reign of which king were they struck? Despite the fact that both were found at Cabyle, neither can be connected to any dated stratum. Coin 1 was a surface find during the excavations and 2 was a stray surface find. Their findspots do not yield useful information about their mint of issue.

The characteristics of the coins are of greater help. Their inscriptions indicate that they were struck under a King Antiochus, evidently one of the fourteen known Seleucid kings of the same name who issued coinage during the hellenistic period.⁴ As has been noted, however, no coins of this type have been attributed to any Seleucid ruler. Antioch adopted an Apollo's head as a principal obverse type, particularly during the reign of Antiochus I,⁵ and the inverted anchor appears frequently as a

Cavarus and bronze issues of the local Thracian rulers Spartocus and Scostocus. Excavations at Cabyle have been carried out since 1972, *Cabyle*, *Izd-vo na Bŭlgarskata akademiia na naukite*, Sofia, vols. 1 (1982) and 2 (1991).

² On the basis of a photograph of coin 1, A. Houghton and W. Moore have earlier suggested that the issue in question may have been struck at Antioch (Houghton, based on type) or Cabyle itself (Moore, based on findspot and style). Both have my special thanks, although, as will be clear from this note, my view differs from theirs. Houghton now accepts Draganov's views.

³ E. T. Newell, *The Coinage of the Eastern Seleucid Mints (ESM)*, ANSNS 1, rpt. (1978), and *The Coinage of the Western Seleucid Mints (WSM)* ANSNS 4, rpt. (1977); Arthur Houghton, *Coins of the Seleucid Empire from the Collection of Arthur Houghton (CSE)*, ACNAC 4 (1983).

⁴ This includes the young son of Seleucus IV.

⁵ *WSM*, p. 103.

Seleucid reverse type during the same period,⁶ but published Antiochene issues do not have stylistic similarities with these two coins from Cabyle.

The new coins are unusually small, 8–9 mm in each case. Newell described a bronze coin struck by Achaeus at Sardes (WSM 1444, 9 mm, 0.85 g) that is closest to these coins in size and weight. Only a few examples of other types and mints can be mentioned as possible parallels.⁷ All are termed bronze “quarters.” Although the two coins are very small, both have monograms in their left field (it is not certain whether or not they have monograms to the right). The monograms, despite the uncertainty of their reading, taken together with the accomplished engraving style, indicate that the coins were produced at a major Seleucid mint and were not simply a local currency.

Detailed comparison of the different types of anchors that appear on Seleucid bronze issues has led me to conclude that the anchor on the coins of Cabyle have their closest parallel among the bronze coins of Antiochus II struck at Sardes, where an anchor with long, thin flukes and rings that appear at each end is shown below a tripod or lyre (Plate 7, 3).⁸ Moreover, the obverse Apollo of the coins from Cabyle has a “loose-lock” hairstyle, a typical feature of the Apollos on Sardian bronze coins of Antiochus II's first series.⁹

Of the numerous bronze issues produced under the Seleucid rulers, only two types of Antiochus II have previously been found in Thrace. Both are products of the Sardes mint and include units and half units with Apollo's head/tripod and Apollo's head/lyre, respectively.¹⁰ They are found in very large numbers in Cabyle and its hinterland (more than 300 have been found at Cabyle alone),¹¹ a fact that tends to support the

⁶ WSM 930, α - β ; 930 γ ; pl. 17, 26.

⁷ WSM 936, 0.97 g; WSM 1378, 1.25 g; WSM 1663, 1.07 g, 1.12 g.

⁸ WSM, Plate 56, 6 and 10, shows units of the Apollo head/tripod type, but with the reverse monograms of WSM 1401, a half unit with rev. lyre.

⁹ WSM, pp. 252–55.

¹⁰ D. Draganov, “The Countermarks of Cabyle,” *Klio* 73 (1991), pp. 220–25; “Les contremarques de Cabyle,” *Cabyle*, vol. 2 (Sofia, 1991), pp. 198–219.

¹¹ D. Draganov, “The $\chi\omega\phi\alpha$ of Cabyle during the IIIrd Century B.C. According to Numismatic Data,” *Septièmes Semaines Philippopolitaines de l'histoire et de la culture Thrace* (Plovdiv, 1990).

proposed attribution of the two small coins under discussion to the same king and mint.

From all the indicators, there appears to have been a sudden and very intense influx of bronze coins to the area of Cabyle during the reign of Antiochus II, reflecting and perhaps intensifying a financial crisis that must have existed at the time. In order to protect the local coinage, Cabyle's municipal authorities were compelled to take special and urgent measures, which involved the countermarking of "foreign" currency and the institution of monetary reforms that included the striking of local coins with new types—all events that occurred in the years between 250 and 245 B.C.¹²

2. THE CHRONOLOGY OF THE LATER COINAGE OF DEMETRIUS I AT ECBATANA

ARTHUR HOUGHTON

Since the publication some 30 years ago of G. Le Rider's monumental corpus of the Seleucid coinages of Susa and other eastern mints,¹³ a number of coins have come to light that help clarify the production of Ecbatana during the later reign of Demetrius I (162–150 B.C.). These include a gold stater, tetradrachms and drachms carrying both a star and the letter K on their obverses, and a tetradrachm with the partial magistrates' names ΦΙΛΙΠ and ΔΙΟΝ on the reverse. All have the epithet ΣΩΤΗΡΟΣ that was added to the king's name and title at Antioch about 158 B.C., an event that marks one of the important evolutionary points of Demetrius's coinage at this and other mints.¹⁴ The significance of the new coins can be best understood in the context of Demetrius's related late issues of Ecbatana, those with the reverse type of a seated Apollo.¹⁵

¹² Draganov, "Chronology of the Autonomous Coinage of Kabyle," *Terra Antiqua Balcanica* 5 (Sofia, 1990), pp. 74–84. See also above n. 10.

¹³ G. Le Rider, *Suse sous les Séleucides et les Parthes* (Paris, 1965) (hereafter, *Suse*).

¹⁴ A. Houghton, "The Coinage of Demetrius I at Ake-Ptolemais," *Florilegium Numismaticum, Studia in Honorem U. Westermark Edita* (Stockholm, 1992), p. 166.

¹⁵ Demetrius's early coinage at Ecbatana has as a reverse the personal type that he instituted at Antioch, a Tyche, but one holding an arrow rather than a scepter as appears elsewhere (*CSE* 1239–42).

THE NEW COINS

Obv.: Diademed head of Demetrius r., fillet border.

Rev.: ΒΑΣΙΛΕΩΣ ΔΗΜΗΤΡΙΟΥ ΣΩΤΗΡΟΣ Nude Apollo seated l. on omphalos, holding arrow and bow; to l., horse's head.

Group 1

Obv. Forelock projects above forehead; one diadem tie falls over the shoulder, the other floats behind head.

Rev. To r., palm branch, no border.

Tetradrachms

1.	A1	P1	16.88	<i>Suse</i> , p. 335, 1a.
2.	A1	P1	16.53	Berlin, <i>Suse</i> , p. 335, 1b.
3.	A1	P1	16.45	Copenhagen. "Susiana," ¹⁶ p. 138, 72; <i>Suse</i> , p. 335, 1c.
4.	A1	P2	16.71	NFA, 12 Oct. 1988, 464. CSE 1245.
5.	A1	P2		Weight not recorded. U.S. market, early 1970s
6.	A1	P?		Weight and reverse die information not recorded. "Susiana," p. 138, 73.

Group 2

Obv. Forelock rises, then falls backward; diadem ends fall straight.

Rev. To r., ☐, dotted border.

Tetradrachm

7.	A2	P3	16.52	New York. <i>Suse</i> , p. 335, 4.
----	----	----	-------	------------------------------------

¹⁶ O. Mørkholm, "A Greek Coin Hoard from Susiana," *ActaA* 36 (1965), pp. 127–56 (hereafter, "Susiana"). City citations indicate public collections and AHNS refers to the author's collection, Washington, D.C.

Group 3

Obv. Forelock crests above brow and sweeps back from forehead; diadem ends fall straight; to l., star above K.
Rev. Dotted border.

Stater

8.	AI	PI	8.19	AHNS 354. Auctiones 17, 7 June 1988, 274.
----	----	----	------	--

Tetradrachms

9.	A3	P4	17.18	CSE 1246.
10.	A3	P5	17.60	CSE 1247.

Drachm

11.	a1	p1	4.11	CSE 1248.
-----	----	----	------	-----------

Group 4

Obv. Forelock projects; diadem ends fall straight; to l., star.
Rev. to l., ΦΙΛΙΠ, ΔΙΟΝ to either side of symbol; no border.

Tetradrachms

12.	A4	P6	16.60	AHNS 334. Plate 7, 4.
13.	A4	P7	16.90	Obv. die of 12. Rev. names, only ΔΙΟΝ on flan. London. Suse, p. 335, 2.

Group 5

Obv. Forelock projects.
Rev. To l., ΑΞΡ (S.E. 161 = 152/1 B.C.), ΘΕΟ; to r., ΦΙΛΙΠ

Drachms

14.		3.99	New York. Suse, p. 336, C29a.
15.		3.92	New York. Suse, p. 336, C29b.
16.		3.95	New York. Suse, p. 336, C29c.
17.		3.76	London. Suse, p. 336, C29d.
18.		3.92	London. Suse, p. 336, C29e.

19.	3.95	<i>CSE</i> 1262; "Près de Suse" 74. ¹⁷
20.	4.07	"Près de Suse" 75.
21.	3.81	Strauss, p. 115, 74. ¹⁸ Plate 7, 5.

Group 6

Obv. As group 4, die of 12.

Rev. No symbol or monogram; no border.

Tetradrachm

22.	A4 P8	17.21	<i>Suse</i> , p. 335, 3.
-----	-------	-------	--------------------------

Group 7

Obv. Forelock sweeps back from forehead; diadem ends fall straight; to l., star; no border.

Tetradrachm

23.	A5 P9	Weight information not recorded. "Susiana," 74.
-----	-------	--

Strauss has suggested that a tetradrachm with Demetrius's portrait without obverse or reverse symbol or control may also belong to the Ecbatana mint.¹⁹ But for the provenance of the coin in an Iranian hoard and a general similarity of its simple reverse (without the identifying mintmark horse's head)²⁰ to that of 22, above, there is nothing to associate it specifically with Demetrius's coinage at this mint. Another tetradrachm from the same Iranian hoard with the symbol palm branch to l., has also been suggested as an issue of Ecbatana.²¹ Although this

¹⁷ A. Houghton and G. Le Rider "Un trésor de monnaies hellénistiques trouvé près de Suse," *RN* 6th ser., 8 (1966), pp. 111–27 (hereafter, "Près de Suse").

¹⁸ P. Strauss, "Un trésor de monnaies hellénistiques trouvé près de Suse," part 2, *RN* 6th ser., 13 (1971), pp. 109–40 (hereafter, Strauss).

¹⁹ Strauss, pp. 114–15, 68.

²⁰ At Ecbatana the horse's head appears first on coins struck late in the reign of Seleucus II (*CSE* 1152–53).

²¹ "Près de Suse," p. 116, 64.

coin was struck from non-adjusted dies like other issues of this mint, there is nothing else to relate it to Ecbatana. New coins may appear to persuasively associate either or both of these tetradrachms with the Ecbatana mint but, for the moment, it is considered best not to include them in the catalogue.

SEQUENCE OF ISSUES AND RELATIVE CHRONOLOGY

The order of the catalogue is based on a number of considerations. One is that the coins of group 1 are closely related to an Apollo reverse drachm of Demetrius with stylistic elements so similar (the modeling of the face, for example, and the king's diadem, one end of which falls ahead of the shoulder) that the obverse dies of both were probably engraved by the same artist.²² The drachm's inscription which includes only the king's title and name, reflects the convention of Demetrius's earliest coinage, before the epithet $\Sigma\Theta\eta\pi\omicron\varsigma$ was applied to his issues at Ecbatana. The close association of tetradrachms and drachm place group 1 early in the series of Demetrius's later coinage.

The group 1 tetradrachms were probably not followed immediately by the succeeding groups. The differences between the first group and the coins of groups 2–6 are substantial, involving both a major change of portrait style (from the image of a rather ordinary man with a projecting forelock to that of an idealized ruler with the anastole of Alexander the Great) as well as the introduction of new iconographic elements. A break in production seems likely to have occurred after the first issue.

The mint may have reopened with the production of the group 2 tetradrachms; this cannot be certain. The obverse die of 7 is not particularly well designed, but the portrait has the new, full look that characterizes this and the coins of groups 3–6, and the reverse carries the dotted border that appears on the following group 3. The reverse mark ω , perhaps a sideways *beta*, may relate 7 to drachms of Ecbatana with the letter **B** on their obverses.²³

²² See CSE 1244.

²³ Although this is not clear from CSE 1259–60, with **B** on the reverse and obverse, respectively, drachms with stylistic characteristics very different from each other and from 7, above.

Group 3 is of particular interest. Not only does it introduce a new symbol on its tetradrachm obverses, a star, but this is accompanied by a prominent K, also to the left of the king's head. The tetradrachms comprise part of a series of coins that include, in addition, a white-gold stater with a similar obverse and reverse and a drachm with the star and K to the left of the king's head but without the horse's head reverse symbol. The significance of the star is uncertain, although stars on Seleucid coinages can sometimes, but not always, be connected with some purpose.²⁴ The meaning of the letter K, taken in isolation, is also not fully clear, but given the nature of the group 3 coins as a whole, K may signify an important date.

The coins of groups 4 and 5 follow immediately. The recently discovered tetradrachm 12 is almost certainly from the same issue as 13, a coin first published by Jenkins and, later, Le Rider.²⁵ Both the new coin and the London example are struck from the same obverse die; and the reverses, while produced from different dies, are similar in every important respect but for the moneyers's name, ΦΙΛΙΠ, which is off flan on the London tetradrachm. The group 5 drachms share the magistrate's name ΦΙΛΙΠ and must be associated with the tetradrachms of group 4.²⁶

On the reasonable assumption that groups 4 and 5 were struck at about the same time, both should be dated to 152/1 BC., the penultimate year of Demetrius's reign.²⁷

Group 6, whose single known tetradrachm has no symbol or controls, was struck from the same obverse die as the tetradrachms of group 4

²⁴ Stars appear in conjunction with royal portraits under Antiochus IV at Ake-Ptolemais (O. Mørkholm, *Studies in the Coinage of Antiochus IV of Syria* [Copenhagen, 1963], p. 45, A1) and at Antioch on the Persian Gulf (CSE 1084–86). They also appear on coins of Antiochus VI at both Apamea and Antioch for unexplained reasons (Apamea; A. Houghton, "The Revolt of Tryphon and the Accession of Antiochus VI at Apamea: The Mints and Chronologies of Antiochus VI and Tryphon," *SNR* 71 [1992], p. 129, A10; Antioch: Hess-Leu 24, 16 Apr. 1964, 240).

²⁵ G. K. Jenkins, "Recent Acquisitions of Greek Coins by the British Museum," *NC* 1959, p. 44, 25; *Suse*, p. 335, 2.

²⁶ *Suse*, p. 336–37. G. K. Jenkins, "Notes on Seleucid Coins," *NC* 1951, p. 10, viewed them as products of another mint.

²⁷ See *Suse*, p. 337.

and would necessarily have followed them. The portrait of the only recorded tetradrachm of group 7 retains the swept-back hair above the brow that characterizes Demetrius's later issues, and has therefore been placed at the end of the series.²⁸

ABSOLUTE CHRONOLOGY

The probable break between the coins of group 1 and those of groups 2–7 has been discussed above. No large gap, if any, is likely to have existed between the issues of groups 2–7. All of these tetradrachms share a number of related characteristics, including the generally full, even blocky appearance of the portrait, with straight diadem ends and, from group 3 onward, the continued appearance of the obverse star.

The coins of group 3 are set apart from Demetrius's other late issues, as has been noted. The sudden appearance of the star and K on their obverse and the fact that they comprise a set of denominations that included gold (an increasingly rare metal among later Seleucid coinages that was reserved for special occasions) proclaim the exceptional nature of this issue. If the coins of group 3 were struck earlier than but about the same time as the datable coins of groups 4 and 5, as seems to be the case, the letter K may signify a number—either 20, using the orthodox system of cardinal numeration in broad use throughout the Seleucid kingdom or, more unusually, 10 according to the system of simple alphabetic numeration. Given the context of the group 3 coins and the probable chronological relationship they have with the issues of groups 4 and 5, K may best be understood as the number 10, and the group 3 coins, then, should be seen as a special issue intended to celebrate Demetrius's decennial in 152 B.C. If such is the case, the group 3 coins, along with the coins of groups 4 and 5, give a fixed reference point that permits the entire series of issues after group 1 to be dated to the end of

²⁸ Demetrius's anastole was an evolution of style that was introduced at Antioch in 155/4 B.C. (Houghton, above n. 14), but was irregularly applied at Ecbatana. The dated drachms of S.E. 161 and associated tetradrachms of group 4, for example, show the projecting forelock of Demetrius's early coinages of Antioch and other mints.

Demetrius's reign, ca. 153–150 B.C. The coins of group 1 may have been struck a year or more earlier; without added information, it is not possible to be more precise.²⁹

DRACHMS

The Apollo-reverse drachms of Ecbatana catalogued by Le Rider in *Suse* and those that have subsequently come to light cannot be easily placed with the series of issues that are catalogued and discussed above. While the drachms with ΣΩΤΗΡΟΣ must belong to Demetrius's later coinage and are almost certain to have been produced after 158 B.C. or so, none are marked in a manner that would closely associate them with the coins of groups 1–7. It has been suggested that the star was introduced ca. 152 B.C., but as the coins of group 5 clearly indicate, this symbol did not appear on all late drachms of Ecbatana. The progression of the king's hairstyle, it has been noted, does not seem to have been systematically followed at Ecbatana and, while coins with a flowing hairstyle (groups 2, 3, and 7 in particular) must be late, those that show the king's portrait with a projecting forelock are not necessarily early. An accurate judgment of the scope and chronology of this king's late drachms of the Ecbatana mint may, in the end, rest only upon a full die study of these coins.³⁰

²⁹ At a mint whose production was linked more closely to Antioch, one might suggest that the stylistically related drachms of Le Rider's type 5 (*CSE* 1244) and the group 1 tetradrachms with ΣΩΤΗΡΟΣ mark a transition point, and that the latter were issued ca. 158 B.C. The case is not so clear with a more distant mint such as Ecbatana, which may not have included the epithet until some years after it was introduced in the West.

³⁰ Of particular interest is where the gold stater and drachms with the reverse letters KA fit within this sequence of coins issued at Ecbatana. These coins (Stater: *Suse*, p. 334, A = Strauss, above n. 18, pl. 16, A = Leu 20, 26 Apr. 1979, 164; drachms: *Suse*, p. 335, 7; p. 336, 21; and *CSE* 1261) may mark another special issue, but they do not appear to be connected to a specific event and are not known to link to other coins. The king's hairstyle on the KA stater is "early," but this may not be meaningful in the context of Demetrius's coinage of the later period at the Ecbatana mint.

3. THE ΕΥΠΙΑΤΡΕΩΝ COINAGE OF ALEXANDER I BALAS

WAYNE MOORE

In 148 B.C. Demetrius II Nicator, with an army of Cretan mercenaries, landed in Cilicia in preparation for an invasion of Syria and the reclamation of the Seleucid throne from the usurper Alexander I Balas.³¹ Alexander's patron and father-in-law, Ptolemy VI Philometor, immediately responded by bringing an Egyptian army up the coast through Palestine, Phoenicia, and Syria, as far as Seleucia Pieria, and garrisoning the main coastal cities with Ptolemaic troops along the way.³²

Ptolemy Philometor thus secured his own interests in Palestine and Phoenicia, while ostensibly coming to the aid of his protégé Alexander Balas. A Paris tetradrachm with Philometor's portrait in the manner of a Seleucid king and apparently dated to the thirty-third year of his reign (148 B.C.) was issued from the mint of Ake-Ptolemais, while an undated issue of bronze with his portrait is thought to be from an uncertain Phoenician mint.³³ The Phoenician coastal cities remained garrisoned with Ptolemaic troops until Philometor's death in the early summer of 145 B.C. (perhaps June), whereupon the local populations rose up and destroyed the Egyptian garrisons in the name of Demetrius II.³⁴

³¹ Joseph. *AJ* XIII, 86, says year 165 which, by the Seleucid Era, would be Oct. 148/Oct. 147 B.C.; E.R. Bevan, *The House of Seleucus*, vol. 2 (London, 1902), p. 218 (hereafter, *HS* 2), makes it "148-147" B.C.; E. Will, *Histoire politique du monde hellénistique*, vol. 2 (Nancy, 1967), p. 317 (hereafter, Will 2), says "147"; see his pp. 314-16 for the usurpation of Alexander Balas and the defeat of Demetrius I, the father of Demetrius II Nicator.

I am grateful to the following for essential information and encouragement in the preparation of this article, and for provision of coins and casts for the plate photography: Michel Amandry, Paris; Carmen Arnold-Biucchi, New York; Arthur Houghton, Washington, D.C.; Georges le Rider, Paris; and H. C. Lindgren, San Francisco. The conclusions expressed are the responsibility of the author.

³² Joseph. *AJ* XIII, 103; *HS* 2, p. 219; E. R. Bevan, *The House of Ptolemy, a History of Egypt under the Ptolemaic Dynasty* (1927, rpt. Ares, 1985), p. 304 (hereafter *HP*).

³³ J. N. Svoronos, *Tà Νομίσματα τῶν χαρτῶν τῶν Πτολεμαίων* (Athens, 1904-8), 1486-88, pl. 48, 19-23 (pl. 18, 20, from The Hague, might be a cast of the Paris coin); *BMCPtol.*, pp. LXV-LXVI, pl. 32, 8, and 20, 7 (the catalogue listing for the bronze, p. 86, 70, apparently has a misprint indicating the portrait as "Ptolemaeus VII").

³⁴ *HS* 2, p. 222; *HP*, p. 305 and n. 1.

In the meantime, Alexander Balas had been issuing tetradrachms with his own name and portrait but on the Ptolemaic weight standard. They had the Ptolemaic eagle as reverse type and were issued from the principal Phoenician cities from the beginning of his reign. They appeared until some months before his own death, which occurred just a few days before that of Philometor in 145 B.C.³⁵ From 148–146/5 B.C., however, Alexander Balas was merely a sub-regent in Phoenicia, which was under direct Ptolemaic control, and his coinage from the region was issued only by the grace of Philometor himself.

This leads us to the coinage issue in question. It involves a rare series of bronze coins that carry dates in close accordance with the approximate three-year period of Ptolemaic occupation discussed above.

Obv. Diademed head of Alexander I Balas r.; border of dots.

Rev. Athena Promachos advancing r., hurling spear (?) and holding out shield; on l., inward facing in two lines, **ΒΑΣΙΛΕΩΣ ΑΛΕΞΑΝΔΡΟΥ**; on r., outward facing in two lines, **ΕΥΠΑΤΡΕΩΝ** and date preceded by L (on 4 and 5 the date is in inner l. field); border of dots.³⁶

Year 165 S.E. = 148/7 B.C.

- | | | | |
|----|--------|-------------|-------------------------------|
| 1. | 6.49 ↑ | ΛΕΕΡ | AHNS 636. Plate 7, 6. |
| 2. | 4.89 ↑ | ΛΕΕΡ | Moore collection. Plate 7, 7. |

³⁵ Joseph. *AJ* XIII, 118; *HS* 2, p. 221. Dated examples of his coinage from Phoenicia, ranging from S. E. 162 (Oct. 151/Oct. 150 B.C.) to S. E. 167 (Oct. 146/Oct. 145 B.C.) include: Sidon, *CSE* 713–15; Tyre, *CSE* 742–50; Berytos, *CSE* 706–7; Ake-Ptolemais, *CSE*, 796–97; A. B. Brett, "Seleucid Coins of Ake-Ptolemais in Phoenicia, Seleucus IV to Tryphon," *ANSMN* 1 (1945), 19–20, and p. 27, n. 14. Coins issued for Alexander Balas in S.E. 167 must necessarily have been restricted to the period between Oct. 146–early 145 B.C., in any event prior to the renunciation of Balas by Philometor and the shifting of his support to Demetrius II. The Ptolemaic army had occupied the Phoenician coastal cities since at least 148 B.C. and would not have allowed any coinage of Balas to be issued from these cities after such a renunciation by their sovereign. The account of Joseph. *AJ* XIII, 106–15 must, I believe, be compressed to the period of late 146–early 145 B.C.

³⁶ The date of each coin is enlarged on the plate for clarity. No. 6 has an incomplete date, which could be either 165 S.E., or 167 S.E.; the fabric and style of the coin is so close to no. 5, that I would place it in 167 S.E. (146/5 B.C.).

- | | | | |
|----------------------------|--------|-------|--|
| 3. | 6.37 ↑ | LEEP | CSE 565. Plate 7, 8. |
| Year 166 S.E. = 147/6 B.C. | | | |
| 4. | 7.40 ↑ | LSEP | ANS (ex H. C. Lindgren).
Plate 7, 9. |
| 5. | 7.37 ↑ | LSEP | AHNS 557. |
| Year 167 S.E. = 146/5 B.C. | | | |
| 6. | 7.80 ↑ | LIEP | Paris, Babelon 883 (weight
confirmed). Plate 8, 10. |
| 7. | 6.74 ↑ | LIEP? | CSE 566. Plate 8, 11. |
| Uncertain | | | |
| 8. | 4.77 ↑ | ? | EΥΠΑΤΕΡ... <i>BMC Sel.</i> , p. 54,
33 (no date visible). |

The word Εὐπατρέων is a community ethnic in the genitive plural, in the same manner as Τυρίων, Σιδονίων, Σελευκέων, Ἀντιοχέων, etc., and it indicates that these coinse are a quasi-municipal issue minted for local circulation.³⁷ The coinage is from a community named *Εὐπάτρία* or *Εὐπάτρεα*—*Εὐπατρις* in the singular.³⁸ Such a place is, as yet, unknown in Seleucid Syria, Phoenicia, and Palestine and may have been only a temporary foundation, perhaps a village or stronghold serving a garrison.

The reverse figure of Athena Promachos ("foremost fighter") reflects a Macedonian type used on coins of many rulers who had, or pretended to have, Macedonian origins, including Seleucus I.³⁹ Here, however, it may be seen as intentionally imitating the archaistic fighting Athena used as a panhellenic propaganda device on the early coinage of Ptolemy I, ca. 314–305 B.C., during his conflict with Antigonus Mono-

³⁷ Meaning a municipal issue with portrait of the Seleucid king.

³⁸ Steph. Byz. *Ethnika* (ed. Meineke, 1849), s.v. "εὐπατρία," records the existence of a similarly named community in Lydia (I am grateful to G. Le Rider for the citation). A. Houghton, *CSE* 566, has suggested that the city might have been a refoundation in honor of Antiochus V Eupator.

³⁹ For the Macedonian rivals and successors of Ptolemy I who employed the animate Athena Promachos as a coin type, see C. M. Havelock, "The Archaistic Athena Promachos in Early Hellenistic Coinages," *AJA* 84 (1980), pp. 41–50.

pthalmos.⁴⁰ Though lacking the archaizing swallowtail mantle, the fighting Athena figure on Alexander Balas's ΕΥΓΙΑΤΡΕΩΝ coinage is very close to the vibrant image of the same goddess that appears on the issues of Ptolemy I, and quite distant from the rather stiff image of a spear-wielding Athena that was carried on bronze coins of Seleucus I issued at Antioch ca. 300–280 B.C.⁴¹

The coins are dated by the Seleucid Era to the last three years of Alexander's reign (148/7–146/5 B.C.), which coincides with the period between the attack of Demetrius II, the subsequent occupation of the Phoenician and Syrian coasts by Ptolemy Philometor, and Alexander's death in the early summer of 145 B.C. They were evidently issued while he was fighting for his crown and his life. The dates are always preceded by the sign L, which is a uniquely Ptolemaic dating device appearing only on coins and weights from south of the river Eleutheros (Nahr el-Kabir) on the Phoenician coast just north of Tripolis.⁴² The L prefix to the date is strong evidence that the coins were minted in a region that had been under Ptolemaic influence.⁴³ As further evidence of Ptolemaic control over these quasi-municipal issues of Alexander Balas, one should note the right facing configuration of the inscriptions, the exact opposite of conventional Seleucid practice, but quite typical of the configuration on the earlier Athena Promachos coins of Ptolemy I.

The border of dots on both sides of the coins is commonly found on quasi-municipal bronze issues of the Seleucid kings from Phoenicia,⁴⁴

⁴⁰ For the coins, see *SNGCOPtol.*, 13–30. I have adopted the views of Havelock with regard to the identification of the fighting Athena as "Promachos" (see, esp. pp. 42–44 and n. 3). On the other hand, A. B. Brett, "Athena Alkidemos of Pella," *ANSMN* 4 (1950), pp. 55–72, and many other writers hold that the figure on the coins reflects the statue of Athena Alkis at Pella, Macedonia. In either case, the symbolism of "military invincibility" (Havelock) is obvious in the aggressive fighting stance of the Athena figure.

⁴¹ See *WSM*, pl. 17, 3; *CSE* 1 and 4 (the same figure reappears on bronze coins of Antiochus II from Tarsus, *WSM*, pl. 49, 10–13).

⁴² H. Seyrig, *Notes on Syrian Coins*, *ANSNM* 119 (1950), p. 33. The L before the date was previously read only on the Paris (Babelon 883) and ANS coins (see *ANS Annual Report* 1992, p. 100 and fig. 1).

⁴³ See Seyrig (above n. 12), p. 34, n. 50, for a tetradrachm of Alexander Balas of Ake-Ptolemais with the date ΛΞΠ (S.E. 166 = 147/6 B.C.). Ake-Ptolemais had been under the direct control of Ptolemy Philometor since 148 B.C.; see *Svor.* 1486.

⁴⁴ See, for example, *CSE* 694–701 (Byblos); 704–5, 710 (Berytos); 712 (Sidon); 726–41, 753, 761 (Tyre); 785–92 (Ake-Ptolemais).

and the provenance of 3 and 7 above is Lebanon, while 4 has been confirmed by Dr. Lindgren as being from either Lebanon or Syria. In addition, Arnold Spaer of Jerusalem confirms that there are no specimens of these Alexander Balas coins in his collection, a fact that tends to exclude a Palestinian or southern Phoenician mint from consideration for these coins, and supports their point of origin in a region north of Ake-Ptolemais and south of the river Eleutheros. The use of the community ethnic in the form on these coins, it should be noted, was common north of Byblos and in Syria proper.⁴⁵

The mint for the ΕΥΠΑΤΡΕΩΝ coins may have been the city of Orthosia (modern Ard-Artusi), which commanded a strategic location at a juncture of the north-south coastal road and the inland route to Emisa and Antioch in the Orontes Valley.⁴⁶ Although a minor community which did not begin to issue coinage of its own until late in the first century B.C., Orthosia's early autonomous issues consistently employed the prefix L before their dates,⁴⁷ and hoards with coins of Ptolemy II, III and IV have been found there.⁴⁸ Still, while an attractive possibility as a location of issue, Orthosia can remain only a conjecture, given the absence of any clear indication of origin on the coins themselves.

In summary, these quasi-municipal coins of Alexander Balas appear to have come from a place in north Phoenicia which took the temporary name Eupatria, or Eupatris, during Alexander's war with Demetrius II. The issue was short-lived, apparently lasting only about three years. The ethnic ΕΥΠΑΤΡΕΩΝ and the Athena Promachos type are linked together in an expression of ancestral Macedonian military heritage, perhaps (but not certainly) indicating that the community of issues was a garrison or fort. In contrast to other Phoenician municipal and quasi-municipal bronze issues struck under the Seleucids, these coins reflect a Greek motif adopted by the Macedonians for their own purposes, and not the hellenized Semitic god and goddess motifs typical

⁴⁵ H. Seyrig, "Démétrias de Phénicie (ou de Palestine)," *Antiquités Syriennes* 4 (1953), p. 122, rpt. of "Antiquités syriennes," *Syria* 27 (1950), p. 55.

⁴⁶ H. Seyrig, "Séleucus I et la fondation de la monarchie syrienne," *Syria* 47 (1970), p. 291, fig. 1.

⁴⁷ H. Seyrig (above, n. 42), p. 31; J. Rouvier, "Numismatique des villes de la Phénicie," *JIAN* 4 (1901), 867-72.

⁴⁸ H. Seyrig (above, n. 42), pp. 4-7.

of many ancient Phoenician cities. In consideration of the political context in which they were struck and the Ptolemaic conventions of the L prefix and the right-facing inscriptions, the community for which they were issued would seem to have been Ptolemaic, although serving Alexander Balas. The evidence points towards a city such as Orthosia as a possible mint of origin for the ΕΥΠΙΑΤΡΕΩΝ coins.

4. COUNTERMARKS OF TRYPHON: COMMENTS ON THE CIRCULATION OF CURRENCY IN NORTHERN SYRIA CA. 150-140 B.C.

ARTHUR HOUGHTON

Since E. T. Newell's publication in 1938 of three second century B.C. tetradrachms, two of Heraklea and one of Lebedos, with the obverse countermark, Macedonian helmet adorned with ibex horn,⁴⁹ a number of other examples, similarly countermarked on their obverses, have come to light. In the following catalogue, the direction of the countermark is by the position of the ibex horn, and the time indication gives the location of the countermark on the coin.⁵⁰

Lebedos

Obv. Head of Athena r.

Rev. ΑΕΒΕΔΙΩΝ Owl 3/4 r., head facing, standing on club, framed by double cornucopia; wreath border.

1. 15.69 Obv. cm l. within oval punch, 2:00; rev. below, ΑΘΕΝΑΙΟΣ. Paris. "Lebedos,"⁵¹ p. 2, 5; *Trésors*,⁵² 25.10.

⁴⁹ E. T. Newell, *Miscellanea Numismatica: Cyrene to India*, ANSNNM 82 (1938), pp. 21-24 (hereafter, *Miscellanea*).

For their assistance in providing information or views important to this note, I am indebted to M. Amandry, C. Arnold-Biucchi, S. Hurter, E. Levante, W. E. Metcalf, M. Price, U. Wartenberg, and to W. Moore for the accompanying photographs.

⁵⁰ City citations indicate major public collections.

⁵¹ M. Amandry, "Les tétradrachmes à la couronne de feuillage frappées à Lebedos (Ionie)," in G. Le Rider *et al.*, eds., *Kraay-Mørkholm Essays* (Louvain, 1989), pp. 1-7 (hereafter, "Lebedos").







⁵² H. Seyrig, *Trésors du Levant Anciens et Nouveaux: Trésors Monétaires Séleucides II* (Paris, 1973) (hereafter, *Trésors*).

2. 15.98 Rev. as 1. *Trésors*, 25.11, no photographic record.
3. 13.72 Obv. cm l. within oval punch, 2:00; rev. below, ΑΠΟΛΛΟΔΟΤΟΣ. New York. "Lebedos," p. 3, 25; *Trésors*, 25.13; *Miscellanea*, p. 22, 12. Plate 8, 12.

Heraklea

Obv. Helmed head of Athena r.

Rev. ΗΡΑΚΛΕΩΤΩΝ Club; oak wreath border.

4. 15.00 Obv. cm l. within oval punch, 2:00; rev. beneath,  Nike,  Paris (1973.1.152). *Trésors*, 25.21.
5. 15.23 Obv. cm l. within oval punch, 2:00; rev. as 4. New York. *Miscellanea*, p. 22, 11; *Trésors*, 25.22.
6. Rev. as 4. *Trésors*, 25.23, no photographic record.
7. 15.15 Obv. cm l. within oval punch, 3:00; rev. as 5. *SNG VonAulock* 1978. Possibly same coin as 6.
8. 15.91 Obv. cm r. within rectangular punch, 9:00; rev. as 4. Glasgow, Hunterian Museum. *Hunter* 2, p. 345, 1.
9. 16.23 Obv. cm r. within rectangular punch, 8:00; rev. as 4. London (1977.10.1.1).
10. 14.35 Obv. cm l. within oval punch, 2:00; rev. beneath,  Nike,  New York. *Miscellanea*, p. 22, 10; *Trésors*, 25.26.
11. Rev. as 10. *Trésors*, 25.27, no photographic record.
12. Obv. cm. r. within rectangular punch, 8:00; rev., beneath,  owl,  AHNS 411. For the undertype and controls, see *Trésors* 25.16–20. Plate 8, 13.

Kyme

Obv. Head of Kyme r.

Rev. ΚΥΜΑΙΩΝ Horse r., l. foreleg raised; beneath, one-handled cup; laurel wreath border.

13. 15.72 Obv. cm r. within rectangular punch, 8:00; rev. ΦΙΛΟΔΟΞΟΣ. AHNS 410. For the undertype, see "Kyme," ⁵³ pp. 35–36, 66–72. Plate 8, 14.

⁵³ J. Oakley, "The Autonomous Wreathed Tetradrachms of Kyme, Aeolis," *ANSMN* 27 (1982), pp. 1–37 (hereafter, "Kyme").

Syros

Obv. Head of Demeter wreathed with grain sheaves, r.

Rev. ΘΕΩΝ ΚΑΒΕΙΡΩΝ ΣΥΡΙΩΝ Kabeiroi, heads facing, standing 3/4 l. and r., holding staffs; laurel wreath border.

14. 13.75 *Obv.* cm r., within rectangular punch, 4:00; *rev.* to lower r., ✕. AHNS 416. See "Syros,"⁵⁴ p. 300. This coin adds a new obverse die. Plate 8, 15.

Newell's attribution in *Miscellanea* of the countermarks to Tryphon, the military commander at Apamea who revolted against Demetrius II in 144 B.C. and advanced a child pretender, Antiochus VI, to the Seleucid throne, has met with no scholarly disagreement.⁵⁵ The countermarks themselves are the same as the reverse type used first toward the end of 142 B.C. on Antiochene drachms of Antiochus VI, then on Tryphon's own coinage of Antioch. According to the hoard evidence below, the date of their appearance is approximately consistent with the period of Tryphon's rule in Syria.⁵⁶ The purpose and specific date of the countermarks deserve reconsideration, however.

In Newell's view, the countermarks were affixed at the outset of Tryphon's reign, after he had replaced the young Antiochus VI, therefore at the very end of 142 or beginning of 141 B.C.⁵⁷ Their purpose, according to Newell, was to ensure that the proclamation of Tryphon's usurpation was accompanied by stamping coins in his treasury to gain support for his open bid for power, especially among the soldiery and persons of influence.

⁵⁴ H. Nicolet-Pierre and M. Amandry, "Les monnaies d'argent de Syros," H. Nilsson, ed. *Studia Westermarck* (Stockholm, 1992), pp. 295–306 (hereafter, "Syros").

⁵⁵ H. Seyrig, *Notes on Syrian Coins*, ANSNNM 119 (1950), p. 9, has suggested that Tryphon's helmet, rather than a personal badge, might symbolize the Zeus of a cult specific to Apamea itself. Quasi-municipal bronze issues of Apamea with the reverse type of Zeus either standing or leaning forward with one foot on a pile of arms show the figure holding a Corinthian helmet, not the highly embellished Attic variety of Tryphon's own coinage (for the types, see Babelon 912–21). Seyrig explains the inconsistency with the suggestion that Tryphon's elaborately decorated helmet may have been an offering to the god.

⁵⁶ A. Houghton, "The Revolt of Tryphon and the Accession of Antiochus VI of Syria," *SNR* 71 (1992), pp. 119–41, hereafter, "Accession," esp. pp. 136–41.

⁵⁷ *Miscellanea*, p. 24.

The countermarked coins pose several questions. One is why the countermarks themselves appear to have been applied so selectively. Only tetradrachms of western Asia Minor (including, for the purpose of this note, the issue of Syros, 15) are known to have been overstruck with Tryphon's helmet. No pseudo-Alexander issues of the type that circulated widely through Syria and the Levant in the third and second centuries B.C. are known to have been so marked.⁵⁸ Nor are there any known Seleucid coins with Tryphon's countermark, as Newell expected would appear in the course of time.⁵⁹

There are a limited number of possible explanations for this. One is, simply, that the number of recorded countermarked coins is still very small, and that, as Newell hoped, others will turn up to show that the pseudo-Alexander, Seleucid, and other currencies of north Syria were in fact also stamped. Another explanation is that the Antioch treasury had no pseudo-Alexanders at the time of Tryphon's accession. This is possible, but it seems very unlikely that the treasury of the Seleucid capital was vacant of Seleucid money as well, and that only issues of Heraklea, Kyme, and other western mints were available for countermarking.

A third explanation is that the coins in question required validation to permit their use and circulation. In this regard it may be significant that the recorded coins with Tryphon's countermark are of low weight

⁵⁸ Private communication from M. Price. The circulation of coinage in the Levant during the third century is explored by G. Le Rider, "Les Alexandres d'argent en Asie Mineure et dans l'Orient séleucide au III^e siècle avant J.C. (c. 275–225); remarques sur le système monétaire des Séleucides et des Ptolemées," *Journal des Savants*, Jan.-Sept. 1986, pp. 3–51. General aspects of the circulation of money in the second century B.C. are discussed by O. Mørkholm, "The Monetary System in the Seleucid Empire after 187 B.C.," *Ancient Coins of the Graeco-Roman World, the Nickle Numismatic Papers* (Calgary, 1984), p. 105; and, most recently, by G. Le Rider, "Séleucos IV à Ptolemaïs, le trésor du Liban 1989," *RN* 34 (1992) pp. 44–45, and "Les ressources financières de Séleucos IV (187–175) et le paiement de l'indemnité aux Romains," *Studies in Honour of Kenneth Jenkins and Robert Carson* (London, 1993), pp. 49–67. Of special note with regard to the circulation of coinage in the early second century B.C. is the hoard analysis provided by E. Ozgen and A. Davesne, "Le Trésor de Oylum Hoyugu," *Trésors et circulation monétaire en Anatolie* (Paris, 1994), pp. 45–59.

⁵⁹ *Miscellanea*, p. 24.

with respect to the Attic standard of the Levant, to which the wreathed coinages of Asia Minor generally conformed.⁶⁰ Validation *might* have been considered necessary for coins, such as these, whose individual weights fell below some threshold determined by Tryphon's administrative authorities. Yet the thesis of weight-related validation seems unlikely, given the fact that no other money of the period, however light, is known to have been similarly countermarked. Moreover, quantified data on the content of hoards of the northern Syria/eastern Asia Minor area indicate that in the decade or so before the period under discussion very low weight pseudo-Alexander coins circulated broadly in the region, apparently without being subject to weight-related validation.⁶¹ The possibility that selective weight-based countermarking did occur in the case of the wreathed tetradrachms cannot be entirely dismissed, but the discovery of only one full-weight (ca. 16.50 g or more) countermarked example of the type would seriously undermine the idea.

The low number of countermarked coins, compared to the considerable volume of wreathed tetradrachms of Asia Minor that seem to have

⁶⁰ A comparison of the weights of Kymaean and Myrinian tetradrachms recorded by Oakley, "Kyme," pp. 22–37, and K. Sacks, "The Wreathed Coins of Aeolian Myrina," *ANSMN* 30 (1985), pp. 29–30, indicates that these matched the contemporary Attic standard in use at Antioch from the later reign of Antiochus IV through that of Antiochus VI (see, on the latter, "Accession," p. 133), with the preponderance of weights for all groups running between 16.50 and 16.79 g and median weights occurring in the interval 16.60–69 g. Data for the issues of Heraklea is lacking, but there is no reason to believe that the standard for coins of this city differed in any significant way from that of Kyme.

⁶¹ The mean weight (excluding coins of 15.30 g or less) of 75 pseudo-Alexander tetradrachms in the American Numismatic Society from the Aintab Hoard (*IGCH* 1542; *Trésors* 13), dated by Seyrig to ca. 160 B.C., but recently down-dated by W. E. Metcalf to the 130s or 120s B.C. or even later, is similarly low, 15.94 g, while the mean weight of some 366 recorded tetradrachms from a recent (1991) partially dispersed hoard of the same approximate date, from north Syria or eastern Asia Minor, is 15.82 g using the same exclusion limit. Data from both hoards indicate no statistically significant difference between the weights of unmarked pseudo-Alexanders and those with anchor countermarks of the type long associated with Antiochus IV (175/4–164 B.C.). For a discussion of the latter hoard and relevant comments on Aintab, see W. E. Metcalf, "A Late Second-Century Hoard of Posthumous Alexanders," *SNR* 73 (1994), pp. 19–60. It is to be noted that the Aleppo Hoard itself included at least seven uncountermarked coins of less than 16.30 g, three of less than 16.00 g.

circulated in Syria at the time when Tryphon empowered himself, is illustrated by a review of the relevant north Syrian and other hoards that can be dated to the period in question.

TABLE OF HOARDS

<i>Hoard (no. of coins) Ref.</i>	<i>Date</i>	<i>Recorded Tetradrachms</i>
Akkar 1956 (69) <i>IGCH</i> 1559; <i>Trésors</i> 18	ca. 150	Alexander III, 39 Asia Minor, 29: Syros, 1; Agae, 2; Cyme, 5; Myrina, 12; Heraklea, 2; Magnesia 5; Smyrna, 2 Seleucids, 1
Ghonsle 1955 (32) <i>IGCH</i> 1560; <i>Trésors</i> 19	ca. 150	Asia Minor, 27: Kyme, 4; Myrina, 7; Aegae, Heraklea, Magnesia, 13; Smyrna, 3 Seleucids, 5.
El Aweiniye (79) <i>IGCH</i> 1550; <i>Trésors</i> 22	ca. 150–140	Asia Minor, 79: Aegae 19; Kyme, 43; Myrina, 15; Magnesia, 2
Baarin 1955 (21) <i>IGCH</i> 1567; <i>Trésors</i> 28	ca. 150–140 ? ^a	Asia Minor, 8: Myrina, 1; Kyme, 5; Smyrna, 2 Seleucid, 9 Bactria, Eucratides, 1
Osmaniye 1968 (ca. 300) <i>IGCH</i> 1433	ca. 145	Athens NS, ca. 40 Alexander III, ca. 20 Asia Minor, ca. 33, Kyme, ca. 10; Myrina, ca. 20; Smyrna, 2; Kos, 1 Seleucid, ca. 1966
North Syria 1906 (38) <i>IGCH</i> 1556; <i>Trésors</i> 20	ca. 145–140	Alexander III, 6 Asia Minor, 29: Myrina, 12; Kyme, 14; Magnesia, 3 Seleucid, 3

Ras Baalbek 1957 (45) <i>Trésors</i> 24	ca. 142	Athens NS, 2 Asia Minor, 14: Myrina, 1; Kyme 3; Aegae, 1; Smyrna, 1; Magnesia, 8 Seleucid, 12 Lagid, 17
Cilicia (Kirikhan) 1972 (5000+); ^b <i>Trésors</i> 23; <i>CH</i> 1, 87; <i>CH</i> 2, 90	ca. 140	Athens NS, 2 Alexander III, 5 Asia Minor, 825+ : Bi- thynia, 1; Syros, 3+ ; Myrina, 133; Kyme, 395; Aegae, 6; Smyrna, 14; Lebedos, 6; Magne- sia, 235; Heraklea, 27; Alabanda, 1 Seleucid, 12
Teffaha 1954 (27+) <i>IGCH</i> 1557; <i>Trésors</i> 21	ca. 140	Alexander III 16+ Asia Minor, 9+ : My- rina, 4+ ; Kyme, 5+ Seleucid, 2
Aleppo, 1930 (40+) <i>IGCH</i> 1562, <i>Trésors</i> 25	ca. 135	Alexander III, 1+ Antigonos Doson, 5 Asia Minor, 28 or 29: Prusias I, 4; Myrina, 1; Kyme, 4; Lebedos, 4; Magnesia, 2; Heraklea, 11 or 12; Alabanda, 2

^a The date of the Baarin Hoard is suggested by its content, which excludes a tetradrachm of Antiochus IX recorded by Seyrig but believed to be an intrusion.

^b According to contemporary reports, the Kirikhan Hoard may have contained more than 8,000 coins, the greatest number of which were wreathed tetradrachms of Kyme, Myrina, Heraklea, and other cities of Asia Minor.

The record shows clearly that, soon after 150 B.C., the pseudo-Alexander tetradrachms that had dominated the currency of the Levant through the third century B.C. and much of the first half of the second, along with the Athenian New Style coins that had played a significant monetary role since the early part of the century, were being replaced

by the wreathed city coins of Asia Minor whose issuance had only begun a decade or so before.⁶² By the time of Tryphon's accession in 142/1 B.C., large numbers of wreathed tetradrachms were circulating in northern Syria.⁶³ Yet of these, only 13 are known with Tryphon's countermark (14, if 6 and 7 are not the same); 9 (or 10) are from a single find, the Aleppo 1930 Hoard.⁶⁴

On balance, the evidence appears to suggest that the countermarking was an isolated, possibly highly selective act, occurring over a very short period, probably at a location without access to extensive monetary resources. Antioch, which produced a continuous, stable coinage under Antiochus VI from about 143 B.C. onward,⁶⁵ and whose treasury probably had considerable reserves of these as well as other Seleucid and foreign currencies, therefore seems to be ruled out as a place of origin for the countermarks. If this is the case in fact, it is unlikely that Tryphon⁶⁶ ordered the countermarking to announce his coup. Instead, the countermarks were probably intended to perform a monetary function to ensure an adequate supply of authorized currency at a time of limited but special need when the cities under Tryphon's control could not immediately produce new silver coinage. A secondary purpose may have been to add revenue to Tryphon's treasury by attaching a premium to the countermarked issues.

The conditions suggested above for the countermarking—that it was of short duration, carried out at a time and place where there was

⁶² Views of the purpose and chronology of the wreathed Asia Minor tetradrachms are discussed, with full references, by Oakley, "Kyme," pp. 16–18. With regard to the dates of commencement of the wreathed tetradrachm series cited here, see "Kyme" p. 15 (165–160 B.C.); "Syros," p. 299 (before 150 B.C.); "Lebedos," p. 6 (after ca. 150 B.C.). Coins of Heraklea first appear in the Akkar 1956 Hoard of ca. 150 B.C. (*Trésors* 18, 61–62, both well preserved), and their series is also likely to have begun a few years earlier. The Akkar Hoard shows the earliest recorded appearance in Syria of significant numbers of wreathed Asia Minor city coins.

⁶³ Sacks, above n. 60, pp. 28–29, suggests the possibility that the wreathed coins, which were produced in quantity following a long-standing pattern involving the flow of western silver for eastern goods, may have been principally, if not entirely, intended for the Syrian market.

⁶⁴ Of the countermarked coins discussed in this article, 9, 12, 13, and 14 may have come from the Kirikhan Hoard, but this cannot be confirmed.

⁶⁵ "Accession," p. 121 (dies); p. 132 (production).

⁶⁶ The date of Tryphon's death is made uncertain by the interpretation of the Tel Dor sling bullet, "Accession," p. 139.

inadequate currency in circulation and, perhaps, no regular mint facility to strike new coinage (therefore not at Antioch), and, finally, that it was probably carried out in northern Syria—seem to be applicable to only a few points of Tryphon's known career. One is when he was at Apamea at the outset of his revolt against Demetrius II, in mid-144 B.C., immediately before he had set up a mint at that city to issue coins with the portrait and name of Antiochus VI. Another possibility is the period of a few months or so when he was at Chalcis toward the end of the same year, preparing to strike at Antioch. A third is at the very end of his career, in 138 or perhaps 137 B.C., after he had fled from Dora to Apamea, where he was killed. Of these, the earlier dates, when Tryphon must have needed money badly to finance his revolt and had little Seleucid or other currency at hand, seem the most preferable.

Although the use of Tryphon's helmet as a countermark appears to point to its use during his sole reign, Tryphon seems not to have shrunk from advertising himself from almost the beginning of his revolt, first prominently showing his own initials **TPY** on the silver coins of Antiochus VI, then applying the indicative Macedonian helmet with ibex horn to the reverses of Antiochene drachms that carried Antiochus's own portrait. There would seem to be no inconsistency with his applying a personal countermark early in his campaign against Demetrius, particularly if this were done at a military encampment, such as Apamea or Chalcis, over which he had sole command.

Returning to the Aleppo 1930 Hoard, whose terminus Seyrig thought to be about 135 B.C., the relatively high number of countermarked coins in the hoard suggests that it was buried not long after the countermarks were affixed, and perhaps not far from their issuing location.⁶⁷ If a date for the countermarks of ca. 144 B.C. is correct, a burial date for the hoard of that year or the following seems most likely. Such a chronology is almost a decade earlier than Seyrig's, but it is consistent with the condition of the hoard's coins, which Seyrig noted were little circu-

⁶⁷ Of the two types of countermarks, only those with left-facing helmets with oval punchmarks (1, 3, 4, 5, 7, and 10) seem to have been represented on coins of the Aleppo Hoard. All other recorded countermarks (8, 9, 12, 13, and 14) have right-facing helmets within rectangular punchmarks, and are on coins of unknown provenances.

lated, if at all.⁶⁸ The very troubled period may also provide a reason for the hoard's burial. It may be significant that the findspot of the hoard, Aleppo, is less than 30 kilometers from the north Syrian town of Quinnesrin, the site of ancient Chalcis, where Tryphon prepared his final assault against Antioch in 144 B.C.

⁶⁸ Seyrig, *Trésors*, p. 87.

BRUTUS, CYPRUS, AND THE COINAGE OF 55 B.C.

(PLATE 9)

STEVEN CERUTTI

In his catalogue of Roman Republican coinage, Michael Crawford dates the following two types of M. Brutus's coinage to 54 B.C.:¹

C. 433/1: *Obv.* head of Libertas, r.; behind **LIBERTAS** downward; border of dots. *Rev.* L. Iunius Brutus [Cos. 509], walking l., between two lictors and preceded by an accensus; in exergue, **BRVTVS**; border of dots.

C. 433/2: *Obv.* head of L. Iunius Brutus [Cos. 509], r.; behind, **BRVTVS** downward; border of dots. *Rev.* head of C. Servilius Ahala [Mag. Eq. 439] r.; behind, **AHALA** downward; border of dots.

Like most of the coin types of the late Roman Republic, the obverse and reverse of both coins refer to the family of the moneyer and work in conjunction with each other. On the obverse of the first coin (C. 433/1, Plate 9, 1), the image of Libertas alludes to Brutus's ancestral tradition of opposing monarchy and is picked up on the reverse by the depiction of Brutus's paternal ancestor L. Iunius Brutus, consul of 509 B.C., whose expulsion of Tarquinius Superbus ended the rule of kings in

¹ M. Crawford, *Roman Republican Coinage* (Cambridge, 1974), 2 vols., p. 455. I would like to express my sincere thanks to the late Professor T. R. S. Broughton for reading a draft of this paper and making many significant suggestions that proved crucial to its completion.

Rome (Livy, 1.59–60; Plut., *Brut.* 1.6). Brutus is shown walking between two lictors bearing fasces installed with axes, an allusion to the fact that Brutus was the first consul in Rome and was awarded the honor of being accompanied by lictors bearing the fasces before his colleague L. Tarquinius Collatinus. Livy's account (2.1–11) of the reorganization of the state under Brutus's consulship emphasizes that *Libertas* was the trademark of Brutus's magistracy, and Livy refers to Brutus as the *vindex libertatis*. The second coin (C. 433/2, Plate 9, 2) shares an obvious common theme with the first: the obverse portrays the bust of L. Brutus and the reverse carries that of Brutus's maternal ancestor P. Servilius Ahala, who killed Sp. Maelius in 439 B.C. when he was aiming at monarchy.²

Along with Crawford's date of 54 B.C. for these two coin types goes the corollary that Brutus held his moneyership in that year, a date that Crawford admits, like those for many of the moneyers of the late Republic, is based largely on conjecture.³ This interpretation of the coins, however, presents certain problems that do not seem to have been addressed or perhaps even framed. First, it is hard to reconcile 54 B.C. as the date of Brutus's moneyership with what is known of Brutus's career and movements in the period. Brutus had been approached by Caesar to serve on his staff in the Gallic and British campaigns of 54—a position he declined (Hieron., *De Vir. Ill.* 82.3–4). But if Brutus had been serving as moneyer in that year, it is unlikely that he would have been considered for service in Caesar's army. Second, Crawford explains the two coin types as “part of a pattern of consistent opposition to Pompey's real or supposed intentions of achieving sole rule,” a view which has recently been repeated.⁴ It is unlikely, however, that Brutus, after refusing to accompany Caesar in 54, would strike coins bearing

² Livy, 4.13.4–14.7; Plut., *Brut.* 1.5. See also Cic., *Cal.* 1.1. For Brutus's admiration for his ancestors, cf. Cic., *Brut.* 331; *Att.* 13.40.1; *Phil.* 2.26; Nep., *Att.* 18.3; Plut., *Brut.* 1.

³ Crawford, p. 88, “...on balance, 54 seems the best year for their moneyerships. . . .”

⁴ Crawford, p. 455; Jane DeRose Evans, *The Art of Persuasion: Political Propaganda from Aeneas to Brutus* (Michigan, 1992), p. 146, sees the two early types of Brutus's coinage as “an oblique threat” to Pompey, although she argues for 59 B.C. for the date of the issue.

hostile slogans aimed at Pompey in the same year, given what is known of the political situation in Rome in the 50s in general and specifically after the renewal of the so-called "first triumvirate" at Luca in 56. It is the aim of this essay to reevaluate Crawford's dating and interpretation of Brutus's two coin types on the evidence of the coin hoards, through a stylistic analysis focusing on the two types in the context of similar types struck in the 50s B.C., and by what is known of Brutus's career in the decade prior to the civil war.

Brutus's coinage is traditionally divided into three chronological groups: (1) the two types of denarii cited above (C. 433/1–4), struck at Rome sometime in the 50s B.C.; (2) twelve types consisting of four aurei, six denarii, and two quinarii (C. 500/1–7, 501/1, 502/1–3, struck from a "moving mint" with C. Cassius and Lentulus Spinther in 43/42 B.C., when Brutus was proconsul of Macedonia; and (3) sixteen types consisting of six aurei, nine denarii, and one quinarius (C. 503/1, 504/1, 505/1–5, 506/1–3, 507/1a–2, 508/1–3), struck at the beginning of 42 B.C., after Brutus was hailed imperator and following his victory over the Lycians.⁵ While the issues of the two later periods, the EID MAR type (C. 508/3) of 42 B.C. for example, are easily datable and readily understandable in the historical context of the period in which they were struck, the date and significance of Brutus's early issue has been a source of constant debate among numismatists.⁶

⁵ Dio Cass. 47.34–36; App. *BCiv.* 4.10.75–82; Plut. *Brut.* 30–32.

⁶ For a record of the EID MAR type, see Dio Cass. 47.25 cf. Plut., *Brut.* 40. For a recent die study of the issue, see H. A. Cahn, "EIDibus MARTiis," *NumAntClas* 18, (1988), pp. 211–32. For a more general study see H. Mattingly, "Eid. Mar.," *AC* 17 (1948), pp. 445–49, and H. J. Stein, "Brutus and the Background of His Coinage," *Num.* March 1940, pp. 1–8. For the debate on the early coinage, see J. Eckhel, *Doctrina Nummorum Velerorum* (Vienna, 1796), pp. 19–25, who, based on a passage in one of Cicero's speeches (*Phil.* 2.11), first dated the two coins to the period following the death of Caesar in 44 B.C.; H. Cohen, *Description générale des monnaies de la république romaines* (Paris 1857), p. 179, assigned the two issues to 59 B.C.; Th. Mommsen, *Geschichte des römischen Münzwesens* (Berlin, 1860), p. 626, adjusted the date to 58; E. Babelon, *Description historique et chronologique des monnaies de la République romaine*, 2 (Paris, 1885–6), p. 114, argued that they could not have been struck prior to the death of Caesar; Grueber *BMCR* 1, pp. 479–80, based on a hoard study, returned the two issues to 59 B.C.; E. A. Sydenham, *Roman Republican Coinage* (Oxford, 1952), p. 150, moved them back to 60 B.C.; A. Alföldi, "The Main Aspects of Political Propaganda on the Coinage of the Roman Republic," in *Essays Mattingly*, pp. 63–95, esp. p. 77, dates the coins as late as 50 B.C.

Crawford's date of 54 B.C. for C. 433/1–2 is based primarily on the authority of the Casaleone hoard, which contained three examples of C. 433/1 and seven of C. 433/2, as well as four examples of the coinage of Q. Pompeius Rufus (C. 434/1–2) which Crawford also assigns to 54 B.C. According to Crawford's chronology, except for a single coin of Calpurnius (C. 437), which Crawford dates to 51 B.C., the issues of Brutus and Rufus would close the hoard. There is nothing to contradict Crawford's date of 54 B.C. for C. 433/1–2 in any of the major coin hoards containing Republican denarii that have come to light since his catalogue appeared in 1974.⁷ Such a date seems to be supported by two recently published hoards that, based on Crawford's chart,⁸ would fall between the Grazzanise and Casaleone hoards. The first of these recently published hoards, the Thessaloniki hoard,⁹ contained among 51 Republican denarii two examples of C. 433/1, and one example of C. 434/1 (Rufus), and closed with the issue of Messalla (C. 435), datable with reasonable certainty to 53 B.C. on the basis of the reverse inscription commemorating the consulship of his father in that year. The second, the Cuceu hoard,¹⁰ contained 473 Republican denarii, and closed with a single example of C. 433/1. But the distribution of issues in the Cuceu hoard is puzzling: after the two examples of Libo (C. 416/1) in 62 B.C. there is a gap of five years until the issue of C. Servilius (C. 423/1) of 57 B.C., followed by only the single issues of Faustus (C. 426/3) of 56, Q. Cassius (C. 428/2) of 55, and P. Capito (C. 429/1) also of 55, closing with an example of Brutus's issue. In addition to these two hoards, we can also

⁷ For a catalogue of recent publications, see A. R. Fernandez and A. G. R. Marquez, "Tesorillo de denarios de plata hallado en una pileta de salazon de sexsi," *RIN* 91 (1989), pp. 119–30; C. M. Petolescu, "Al doilea tezaur de monede romane republicane descoperit la Farcașele, jud. Olt," *BSNR* 77–79 (1986), pp. 117–26; R. Ocheșanu and G. Papuc, "Un Texaur de denari din epoca lui Augustus descoperit in Dobrogea," *BSNR* 77–79 (1986), pp. 127–41; B. Ilakovic and I. Mirnik, "The 1968 Aenona Hoard," *NC* 144 (1984), pp. 26–27; J. C. Sanchez, "El tesoro de denarios romano-republicano de Fuente de Cantos (Badajoz)," *Acta Num* 12 (1982), pp. 97–125; B. Mitrea and V. Drob, "Un tezaur de denari romani republicani descoperit in judetul Dimbovita," *BSNR* 75–76 (1983), pp. 101–14.

⁸ Crawford, pp. 658–59.

⁹ M. D. Caramessini, "Trésor de deniers de la République romaine trouvé à Thessalonique," *NumAntClas* 13 (1984), pp. 139–45.

¹⁰ E. Chirila, "Tezaurul monetar de la Cuceu," *AMusPorol* 7 (1983), pp. 101–18.

add the Salasul de Sus hoard, which contained 106 Republican denarii.¹¹ While the Salasul de Sus hoard is believed to have closed with a single example of Brutus's Libertas type, there is also a gap of four years between that coin and the preceding issue of Scaurus/Hypsaeus (C. 422), struck in 58 B.C. Combining these three hoards with Crawford's Casaleone and Grazzanise hoards, the chronology is as in Table 1.

TABLE 1

Crawford's Chronology of Moneyers

<i>Moneyer</i>	<i>C.</i>	<i>Date</i>	<i>Cuceu</i>	<i>Salasul de Sus</i>	<i>Grazza- nise</i>	<i>Thessa- loniki</i>	<i>Casa- leone</i>
P. Hypsaeus	420	60			1		4
M. Sufenas	421	59			1		4
M. Scaurus/ P. Hypsaeus	422	58		1	9	2	24
C. Servilius	423	57	1		1	1	4
C. Nonianus	424	57					
L. Philippus	425	56			11	3	20
Faustus Sulla	426	56	1				5
C. Memmius	427	56			2		1
Q. Cassius	428	55	1		2	2	14
P. Capito	429	55	1		2	1	3
P. Crassus	430	55					1
A. Plautius	431	55			2		5
Cn. Plancius	432	55				1	6
M. Brutus	433	54	1	1	4	3	10
Q. Rufus	434	54				1	4
M. Messalla	435	53					
L. Vinicius	436	52					
C. Calpurnius	437	51					1

While the Cuceu, Thessaloniki, and Salasul de Sus hoards do support 54 B.C. as a reasonable terminus ante quem for Brutus's two types, there is nothing to prevent us from moving the two coins to an earlier date.

Crawford's chronology of the coinage of the 50s B.C. remained unchallenged until Hersh and Walker published the Mesagne hoard in

¹¹ O. Floca, "Descoperirea Monetara de la Salasul de Sus," SCN 3 (1960), pp. 89-134.

1984, a huge find containing 5,940 Republican denarii.¹² Although the Mesagne hoard did not contain any issues after 58 B.C., the consistency of the distribution of the issues allowed Hersh and Walker to make some important adjustments to Crawford's chronology. In their revised chronology, however, Hersh and Walker maintain Crawford's date of 54 B.C. for Brutus's issue. Their arrangement of the moneyers is as follows.

TABLE 2

Hersh and Walker's Chronology of Moneyers

<i>Moneyer</i>	<i>C.</i>	<i>Date</i>	<i>Mesagne</i>	<i>Salasul de Sus</i>	<i>Cuceu</i>	<i>Grazzanise</i>	<i>Thessaloniki</i>	<i>Casaleone</i>
L. Longinus	413	60	108		4	2	1	8
L. Fabatus	412	59	138	1	2	3		7
M. Scaurus/ P. Hypsaesus	422	58	196	1		9	2	24
M. Lepidus	419	58	7					
M. Piso Frugi	418	58						
L. Torquatus	411	58						
M. Cestianus	405	57			1	1	2	6
M. Sufenas	421	57				1		4
L. Philippus	425	57				11	3	20
P. Hypsaesus	420	57				1		4
Faustus Sulla	426	56			1			5
C. Memmius	427	56				2		1
Q. Musa	410	56				1	1	4
C. Nonianus	424	56						
P. Crassus	430	55						1
Q. Cassius	428	55			1	2	2	14
P. Capito	429	55			1	2	1	3
A. Plautius	431	55				2		5
Cn. Plancius	432	55					1	6
M. Brutus	433	54		1	1	4	3	10
Q. Rufus	434	54				2	1	4
C. Servilius	423	53			1	1	1	4
M. Messalla	435	53				1		

¹² C. Hersh and A. Walker, "The Mesagne Hoard," *ANSMN* 29 (1984), pp. 103-34.

C. Calvus	437	53
L. Vinicius	436	52
S. Sulpicius	438	51

1

The importance of the Mesagne hoard for establishing a more authoritative chronology of the coinage of the 50s B.C. was also recently recognized by Rockman,¹³ who, although he did not introduce any new hoard evidence, synthesized the chronologies of Hersh and Walker and Crawford and offered some further adjustments based on stylistic criteria and the historical record to arrive at a new chronology for the period of 60 to 50 B.C. But, like Hersh and Walker, Rockman kept Brutus's two types in 54 because, according to him, "they fit nowhere else."¹⁴

TABLE 3

Comparative Chronology of Moneyers

<i>Date</i>	<i>Crawford</i>	<i>Hersh and Walker</i>	<i>Rockman</i>
60	P. Hypsaeus (S.C.)	L. Longinus	L. Longinus
59	M. Sufenas	L. Fabatus	L. Fabatus
58	M. Scaurus/ P. Hypsaeus	M. Scaurus/ P. Hypsaeus M. Lepidus M. Piso Frugi L. Torquatus	M. Scaurus. P. Hypsaeus
57	C. Servilius C. Nonianus	M. Cestianus M. Sufenas P. Hypsaeus L. Philippus	M. Cestianus M. Sufenas P. Hypsaeus C. Nonianus
56	Faustus Sulla L. Philippus C. Memmius	Faustus Sulla C. Nonianus C. Memmius Q. Musa	Faustus Sulla L. Philippus C. Memmius Q. Musa
55	Q. Cassius P. Capito P. Crassus	Q. Casius P. Capito P. Crassus	Q. Cassius P. Capito P. Crassus

¹³ M. Rockman, "The Coins of the Roman Republic from 60 to 50 B.C.: Another Look at Chronology, *The Celator* 6, 2 (1992), pp. 8-14.

¹⁴ Rockman, p. 14.

	A. Plautius	A. Plautius	A. Plautius
	Cn. Plancius	Cn. Plancius	Cn. Plancius
54	M. Brutus	M. Brutus	M. Brutus
	Q. Rufus	Q. Rufus	Q. Rufus
53	M. Messalla	M. Messalla	M. Messalla
		C. Calvus	C. Calvus
		C. Servilius	C. Servilius
52	L. Vinicius	L. Vinicius	L. Vinicius
51	C. Calvus	S. Sulpicius	S. Sulpicius

There are four important changes in Crawford's chronology made by Hersh and Walker and supported by Rockman. (1) P. Hypsaesus's S.C. issue should be moved from 60 to 57 B.C. because of its absence from the Mesagne hoard. Stylistically it belongs with the issue of M. Sufenas, which is also absent from the Mesagne hoard, and both issues should be moved to 57. They could only have been struck in 57 B.C. because Hypsaesus held the curule aedileship with Scaurus in 58 and struck coins in that year as well¹⁵ and in 55 was praetor with Sufenas who had been tribune of the plebs in 56. (2) C. Servilius's issue should be moved from 57 to 53 B.C. because of its absence from all hoards until the Grazzanise hoard, when it appears in conjunction with the issues of Brutus and Rufus. (3) Although Rockman feels C. Considius Nonianus should remain in 57 and not be moved to 56, as Hersh and Walker would like, the style of the coin identifies it as the work of the die engraver of the issue of Faustus Sulla (C. 426/1) in 56, and therefore it should be moved to that year. (4) Although Crawford dates the issue of C. Calvus (C. 437) to 51 B.C., based on hoard evidence and the year of his questorship in 50,¹⁶ both Rockman and Hersh and Walker would move him to 53 B.C. While many of these adjustments are helpful in arriving at a more accurate chronology of the coinage of the decade from 60 to 50 B.C., many are also problematic and require further analysis.

Like Crawford, Rockman realized that because of the inconclusive evidence of the hoards, a stylistic evaluation was necessary in order to arrive at a chronology of the coinage of the 50s B.C. However, neither Crawford nor Rockman seems to have noticed that, as the issues of the

¹⁵ Cic., *Off.* 257; *Sest.* 116; *Asc.* 18C; *Val. Max.* 2.4.6–7; Pliny, *NH* 8.64 and 96, 9.11, 34.36, 35.127, 36.50; *Amm. Marc.* 22.15.24; *Solin.* 32.31, 34.2.

¹⁶ Cic., *Fam.* 2.15.4; 2.19; *Att.* 6.2.10, 4.1, and 5.3.

50s begin to fall into place based on the hoard evidence, a distinct stylistic pattern emerges. For each year from 57 to 52 B.C. there is an obverse female head type with consistent similarities (Plate 9, 3–12). (1) All the heads face right, are of similar size, and share the same refinement of facial features. (2) The hair, whether tied with a band, laureate, or diademed, is consistently rendered in wavy, parallel lines and rolled into a tight chignon with mannered tendrils escaping down the nape of the neck. (3) Each wears a large, single pendant cruciform earring.¹⁷ This earring appears on at least one issue for each year from 57 to 52 B.C., and sometimes on as many as three. While this style of earring occurs in the issues of a few moneyers before this period (Plate 9, 13–14),¹⁸ the frequency and consistency with which it appears from 57 to 52 is unprecedented in Roman Republican coinage. After a lapse of two years, the cruciform earring appears again in several issues of Caesar's coinage from 49 to 46 B.C. (Plate 9, 15–19), but the workmanship is clearly different and lacks the consistency of the issues from 57 to 52 B.C.¹⁹ According to the revised chronologies of Crawford, Hersh and Walker, and Rockman, there are ten issues bearing this female obverse head.

TABLE 4

Issues with Similar Head Types

<i>Moneyer</i>	<i>C.</i>	<i>Date</i>	<i>Plate</i>	<i>Female Head Type</i>
P. Hypsaeus	420/2a	57	3	Leuconoe
C. Nonianus	424/1	56	4	Venus
Faustus Sulla	426/1	56	5	Diana

¹⁷ Similar in size and style to the single and triple pendant earrings occurring consistently on Syracusan decadrachms of the fourth century. For a catalogue of these, see E. S. G. Robinson and M. Castro Hipólito, *A Catalogue of the Calouste Gulbenkian Collection of Greek Coins* (Lisbon, 1971), 301–18.

¹⁸ They are C. Norbanus (C. 357/1b), 83 B.C., and C. Hosidius (C. 407), 68 B.C. For a variation, see the triple pendant earring of C. Annius (C. 366/1c), 82–81 B.C.

¹⁹ These are: Mn. Acilius (C. 442/1a), 49 B.C.; Q. Sicinius (C. 440/1), 48/47 B.C.; Caesar (C. 452/2), 46 B.C.; T. Carisius (C. 464/2), 46 B.C.; and Palikanus (C. 473/1), 45 B.C.

C. Memmius	427/1	56	6	Ceres
Q. Cassius	428/2	55	7	Libertas
P. Crassus	430/1	55	8	Venus
Cn. Plancius	432/1	55	9	Macedonia (?)
M. Brutus	433/1	54	10	Libertas
C. Servilius	423/1	53	11	Flora
L. Vinicius	436/1	52	12	Concordia

The stylistic similarities shared by these coins point to their being the product of one or two die engravers working at the mint in Rome in the period from 57 to 52.²⁰ That the obverse of Brutus's *Libertas* type also shares these characteristics confirms that both of Brutus's coin types (C. 433/1–2) belong to this group, though it is not certain where in the chronology they should fall.

Although hoard evidence is inconclusive for establishing 54 B.C. as anything more than a *terminus ante quem* for Brutus's two types, there are some dates that can be fixed with certainty for the moneyers of this period. A secure date of 58 B.C. can be set for the joint issue of M. Aemilius Scaurus and P. Plautius Hypsaeus (C. 422), struck during their curule aedileships, for several ancient sources record that they held this office in that year. Likewise, the associated issues of A. Plautius and Cn. Plancius, struck in 55 B.C., the year of their curule aedileship, provide an important fixed date.²¹ For the moneyership of P. Crassus, 55 B.C. is also the only year available, since he was in Aquitania with Caesar from 58 to 56²² and joined his father, the triumvir, in the Parthian expedition in the second half of 54.²³ Crawford's date of 56 B.C. for the issue of L. Philippus (C. 425) also seems reliable, based on the fact that his father held his consulship in that year.²⁴ Similarly we can

²⁰ Similar studies have shown that often even large issues, such as that of Thorius Balbus (C. 316/1–2, 105 B.C.) or P. Crepusius (C. 361/1a–c, 82 B.C.), are the product of as few as two die engravers, see T. V. Buttrey, "The Denarii of P. Crepusius and the Roman Republican Mint Organization," *ANMSMN* 21 (1976), pp. 67–107, and C. A. Hersch, "Sequence Marks on Denarii of Publius Crepusius," *NC* 1952, pp. 52–66.

²¹ For the aedileships of A. Plautius and Cn. Plancius, see the discussion in T. R. S. Broughton, *The Magistrates of the Roman Republic*, vol. 3 (Atlanta, 1986), p. 158, and Cic., *Planc.* 49.

²² Caes. *BGall.* 1.52.7, 2.34, 3.11; Dio Cass. 39.31.2, 39.46; Oros. 6.8.7.

²³ Plut., *Crassus* 17.4–6.

²⁴ Cic., *Att.* 5.21.11, *Fam.* 1.9.8; Asc. 2C; Dio Cass. 39.

date the issue of S. Sulpicius (C. 438) to 51, the year his father S. Sulpicius Rufus held his consulship,²⁵ and 53 B.C. is a secure date for the issue of M. Valerius Messalla (C. 435) in view of the reverse inscription **PATRE COS** commemorating his father's consulship in that year. While there is nothing so conclusive to help establish a date for Brutus's two types, the historical record of Brutus's career during this period narrows the range of possibilities considerably.

Although little is known of Brutus's early career, his movements from 59 to 51 B.C. are fairly well documented. From 58 to 56 B.C. Brutus was not in Rome because he accompanied his uncle M. Porcius Cato to Cyprus²⁶ and from 53 to 51 B.C. he was also absent from Rome when he traveled to Cilicia as quaestor on the staff of his father-in-law Appius Claudius.²⁷ Given the hoard and stylistic evidence, Brutus's two types belong somewhere in the 50s B.C. The historical record indicates that Brutus was in Rome only in 59, 55, and 54, so those are the years he could have struck coins in Rome.

The earliest date, 59 B.C., has been an attractive date for numismatists who would like to see Brutus's early coinage as a reflection of his political partisanship in that year, but there is really no sound historical basis for it. Just because Brutus commemorated his participation in the assassination of Julius Caesar by issuing coin types in 43/42 B.C. bearing the image of *Libertas* and his ancestors L. Brutus and Ahala, does not necessarily mean that he issued such types in 59 because he was anti-Pompeian. Crawford and others, however, maintain this interpretation and seek support for it in Brutus's alleged involvement in the "Vettius affair" of 59, when Brutus was implicated by L. Vettius as a co-conspirator in a botched attempt to assassinate Pompey.²⁸ But what is significant is that Suetonius, Plutarch, Appian, and Dio all omit Brutus from their accounts of the so-called conspiracy, and while Cicero mentions him (*Att.* 2.24.2–3), he questions the integrity, such as it was, of the entire affair and concludes, as does Suetonius, that it was a put-

²⁵ Cic., *Att.* 5.21.9, *Fam.* 8.8.5, 10.3, 12.15.2; Sall., *Hist.* 1.11; Dio Cass. 40.

²⁶ Plut., *Cat. Min.* 36, *Brut.* 4; Vell. Pat. 2.45.4.

²⁷ Cic., *Fam.* 3.4.2, *Att.* 6.1, cf. 5.21.10.

²⁸ Evans (above, n. 4), p. 146, offers 59 as the date of C. 433/1–2, suggesting that it was because of his coin types that Brutus was implicated in the conspiracy in the first place.

up job by Caesar.²⁹ Further, with the redating of Hypsaeus obverse female head type to 57, that year becomes the stylistic terminus post quem for Brutus's Libertas type.

Although Crawford dates Brutus's issue to 54 B.C., he, too, persists in the belief that the two coin types should be interpreted as anti-Pompeian propaganda and sees them as a political reaction to "rumors of a dictatorship for Pompey" which began circulating in that year.³⁰ But Cicero, whenever he reports these rumors in his letters,³¹ consistently qualifies them by expressing his own doubts as to their veracity or even possibility. Indeed, in one letter he reports that Pompey himself denied having any interest in a dictatorship, though Cicero alludes that this may not always have been the case.³² That Pompey was aiming for a dictatorship following the renewal of the first triumvirate at Luca in 56, however, seems unlikely. Even if Pompey were aspiring to monarchy in 54, there is no evidence to support the claim that Brutus's two coin types were intended to allude to anything more than his ancestors' historical achievements. Although we have no way of knowing what was going on in Brutus's mind during this time, we have Cicero's letters to his brother Quintus who, in 54 B.C., served as legatus on Caesar's staff in Gaul and Britain, while Marcus was serving as legatus to Pompey for the *cura annonae*.³³ Throughout the correspondence between the two brothers in 54 one fact remains clear: they were both acutely aware of the importance of cultivating the goodwill of both Caesar and Pompey. In light of this it is hard to believe that Brutus, who had already been offered and declined a position on Caesar's staff for the campaigns of 54, could see any possible advantage in estranging Pompey, especially when his politically aware contemporaries, such as Marcus and Quintus Cicero, were doing all they could to please both remaining triumvirs. Given Brutus's refusal to serve on Caesar's staff in 54, it makes more

²⁹ For a good review of the entire Vettius affair and the conflicting accounts of the sources, see W. C. McDermott, "Vettius ille, ille noster index," *TAPA* 80 (1949), pp. 351–67, and C. Meier, "Zur Chronologie und Politik in Caesars erstem Konsulat," *Historia* 10 (1961), pp. 68–98, esp. pp. 88–96.

³⁰ Crawford, p. 456.

³¹ Cic., *QFr.* 2.14 (13).5, 3.4.1, 6(8).4 and 6, 7(9).3; *All.* 4.18.3.

³² Cic., *QFr.* 3.6(8).4.

³³ The two brothers were in constant touch, Cic., *QFr.* 2.12–3.9.

sense that he reconcile with Pompey, especially once he was sure of Pompey's leadership against Caesar. Despite any grudge Brutus may have held against Pompey for the death of his father, uncle Cato had quite a strong influence in holding his nephew's allegiance to the triumvir. Cato's influence aside, that Brutus would be so politically irresponsible as to attempt to estrange Pompey in 54 seems even more unlikely when we take into account that he would choose Pompey's side in the civil war only three years later.

If Brutus's issue is moved from 54 to 55 B.C., the timing of the issue is even more historically logical. Brutus accompanied Cato, who had been sent as *quaestor cum iure praetorio*³⁴ to annex Cyprus and restore the exiles to Byzantium under the *lex clodia de rege Ptolemaeo et de insula Cypro publicanda* of 58.³⁵ Although there may have been personal and political considerations on Clodius's part for sending Cato to Cyprus,³⁶ according to Ammianus Marcellinus (14.8.15) and Rufius Festus (*Brev.* 13.1), the true motivation for the Cypriote expedition was economic. Both report that Cato was sent to Cyprus because of a serious shortage of money in the treasury at Rome, a fact that is supported by Cicero.³⁷ As E. Badian has correctly noticed, the entire Cypriote expedition was from its inception an integral part of Clodius's program and legislation of 58 B.C., the annexation of Cyprus being necessary to pay for his *lex frumentaria*.³⁸ Regardless of his portrayal in

³⁴ Vell. Pat. 2.45.

³⁵ Cic., *Dom.* 20, 25, 52–53, 65; *Sest.* 26, 56–62; *Har. Resp.* 58; Vell. Pat. 2.45.4; Livy, *Per.* 104; App. *BCiv.* 2.23. According to *BMCRR* 1, p. 480, this trip had been suggested by Caesar, who wished to keep Brutus out of controversy following the Vettius affair. According to J. Stein (above, n. 6), p. 3, it was a "retirement from public life as a consequence of what he had done at the mint." Both these explanations are implausible, the former because of the conflicting reports we have of the Vettius affair, the latter because we know from the evidence of the hoards that Brutus could not have struck in 59 B.C.

³⁶ Revenge for Ptolemy's failure to rescue Clodius from pirates has also occurred to some as a motive (Dio Cass. 38.30.5; App. *BCiv.* 2.23), but this seems unlikely.

³⁷ Cic., *Balb.* 61; *Prov. Cons.* 28; *Fam.* 1.7.10.

³⁸ Cic., *Sest.* 25, 55; *Dom.* 10, 25; Dio Cass., 38.13.1, E. Badian, "M. Porcius Cato and the Annexation and Early Administration of Cyprus," *JRS* 55 (1965), pp. 110–21, following S. I. Oost, "Cato Uticensis and the Annexation of Cyprus," *Class Phil* (1955), pp. 98–112. Some of the expense for the *lex Clodia frumentaria* may be reflected in the large issues of M. Scaurus and P. Hypsaesus in 58, though we should also take into account Caesar's *lex agraria* (Cic., *Dom.* 23).

Cicero's speeches and letters, Clodius was anything but politically short-sighted, as his legislation of 58 B.C. clearly shows.³⁹ Caesar, despite what Suetonius (*Iul.* 54) says about the wealth that he accumulated in Gaul, seems to have been in constant need of money to pay for his enormous army of eight legions.⁴⁰ In addition, in 56 B.C. the senate granted him a controversial stipendium, despite a severe shortage of funds in the treasury, to help pay for his army.⁴¹ Since Clodius was one of Caesar's agents, he must have been kept well-informed of Caesar's financial needs in the field, and we need hardly ask whether the scale of the profits to be realized from the liquidation of Ptolemy's assets was not known by both Clodius and Caesar.

The revenues from the reorganization of Cyprus were the stuff of legend even in antiquity.⁴² According to Plutarch (*Cat. Min.* 38), Cato brought 7,000 talents of silver back to Rome, more than the nearly 6,000 Caesar is said to have extracted from Ptolemy Auletes in 59.⁴³ With so much silver coming into Rome from Cyprus at the end of 56 (the only substantial revenues that we hear of in this period) it is logical that a large portion of it would have been immediately converted into denarii in 55 to cover the shortfall created not only by Caesar's stipendium,⁴⁴ but also, and ironically enough, by the high cost of Pompey's *cura annonae*, the unfortunate consequence of the *lex Clodia frumentaria*.⁴⁵ Such financial demands imposed upon the treasury by the two remaining triumvirs may also explain why the issues of the moneyers of the years 56 to 55 B.C. are the largest not only of the decade from 60 to

³⁹ For a list and description of the *leges Clodiae*, see G. Rotondi, *Leges Publicae Populi Romani* (Hildesheim, 1966), pp. 393–99.

⁴⁰ Caesar's British campaign could hardly have been called profitable (Cic., *Fam.* 7.71; *QFr.* 31.10; *All.* 4.17.6, 18.5; Plut., *Caes.* 23.2).

⁴¹ Cic., *Balb.* 61; *Prov. Cons.* 28; *Fam.* 1.7.10

⁴² Vell. Pat. 2.45; Cic., *Har. Resp.* 59, *Sest.* 57.

⁴³ Suet., *Iul.* 11, 54.3; Plut., *Crass.* 13.1.

⁴⁴ For a discussion of the issues surrounding the stipendium, as well as Caesar's *decem legati*, see J. P. V. D. Balsdon, "Roman History, 65–60 B.C.: Five Problems," *JRS* 52 (1946), pp. 134–41, esp. pp. 137–39.

⁴⁵ Cic., *Dom.* 25. The annual cost of Pompey's grain commission was nearly 27,000,000 denarii a year (Cic., *Sest.* 55, *Asc.* 8C; Schol. Bob. 132St; Plut., *Pomp.* 45).

50 B.C., but are rivaled only by those of the Sullan coinage of the 80s, when Rome had 13 legions in the field.⁴⁶

According to Plutarch (*Brut.* 3.2–3), Brutus's responsibilities in the Cypriote expedition specifically included converting (*ἐξαργυρίζειν*) Ptolemy's property into money (*χρήματα*), presumably eastern coin, which was then probably melted down into silver bullion before being transported back to Rome at the end of 56 B.C. Cato would naturally have entrusted this most important part of the mission to Brutus, for Brutus maintained relations with agents in the financial market in Cyprus during this period and had many clients there to whom he lent money.⁴⁷ Since it had been Brutus's responsibility to supervise the auction of Ptolemy's possessions and oversee the conveyance of the revenues back to Rome, it makes sense that whatever portion of the capital that was turned over to the mint in Rome to be struck into denarii for the year 55 would also have remained under Brutus's charge.

Although there seems to be no clear statement of it, the moneyers of the late Roman republic were annual officials, elected by the people as a whole, not by just the *plebs* as the tribunes and the plebeian aediles were.⁴⁸ If the elections for 55 had been held in 56 at the usual time in the summer, it is probable that a return of Cato and Brutus from Cyprus late in the summer of 56 would have found the places all filled, and Brutus would have had to wait for the elections in the summer of 55 for his moneyership in 54. But the delay of the elections of Pompey and Crassus⁴⁹ and the lower officials after them under an *Interrex* early in 55 would have left the way open for Brutus to be a candidate in and for 55.

⁴⁶ For a study of the relationship between coinage and expenditure, see Crawford, pp. 696–701, and B. W. Frier, "Roman Coinage and Army Pay: Techniques for Evaluating Statistics," *NumAntClas* 10 (1981), pp. 285–95.

⁴⁷ These were primarily at Salamis. We know the names of several *negotiatores* with whom Brutus did business or by whom he was variously represented in business transactions: Matinius, Scaptius, C. Vennonius, and M. Laenius (Cic., *Att.* 6.2.4, 3.). Cicero even tells us that in at least one case Brutus took part in a joint venture with Pompey in lending money to Ariobarzanes, but the details are too sketchy to piece together.

⁴⁸ See Th. Mommsen, *Das Römische Staatsrecht*, vol. 1, 3rd ed. (Berlin, 1887), pp. 567–72.

⁴⁹ Cic., *Att.* 4. 8a1–2; *QFr.* 2.7.2; Vell. Pat. 2.46; Plut., *Crass.* 15; *Pomp.* 51.4–52.2; *Cal. Min.* 41–42.

If we move the year of Brutus's moneyership from 54 to 55 B.C., he becomes the sixth moneyer at the mint in that year, an extremely high number. This, however, is not in itself a basis for objection given the amount of coinage struck in that year. But moving Brutus's issue to 55 would seem to contradict, or at any rate deny, any political motive he might have intended for his *Libertas* issue, because 55 is the only year of the decade in which another *Libertas* type was struck, that of Q. Cassius (C. 428/2, Plate 9, 7), one of Pompey's supporters. Cassius's obverse type bears *Libertas* facing right. On the reverse is the temple of Vesta with a curule chair, to left a voting urn, to right a tablet inscribed *AC* for *absolvo* and *condemno*. Both the obverse and the reverse of this coin refer to the *lex Cassia tabellaria* of 137 B.C., the law responsible for the introduction of the secret ballot to all jury trials except those for *perduellio*.⁵⁰ To read the traditional anti-Pompeian message into Brutus's *Libertas*/Brutus and Brutus/Ahala types would present a conflict of interest between Brutus and Cassius, for it is not likely that Brutus, had he wanted to propagate an anti-Pompeian message through his coinage, would have chosen an obverse type identical to that of a moneyer of the same year whose political partisanship was clearly pro-Pompeian.⁵¹ The hoard evidence allows us to reverse the sequence of the moneyerships of Brutus and Cassius, moving Brutus to 55 and Cassius to 54 B.C.; however, we still find ourselves faced with the same problem: why would Cassius, a supporter of Pompey, repeat Brutus's *Libertas* type in 54 if Brutus intended his own *Libertas* issue of the preceding year to be an anti-Pompeian statement?⁵² It seems a more reasonable interpretation of the evidence, in light of the similarity between Brutus's and Cassius's *Libertas* types, not to read any specific propagandistic intention into Brutus's coinage, but to recognize that in his early issue Brutus was simply following the traditional convention of alluding to the accomplishments of his ancestors for his own political advancement.

⁵⁰ Cic. *Leg.* 3.35, *Brut.* 97, 106, *Sest.* 103, *Amic.* 41, *Corn.* 78; Asc. p. 78; *Schol. Bob.* p. 303.

⁵¹ Q. Cassius would be chosen quaestor *sine sorte* by Pompey in 52. B.C. to serve in Spain (Cic., *Att.* 6.6.4, *Fam.* 2.15.4; Bell. *Alex.* 48.1, 50.1; Dio Cass. 41.24.2).

⁵² It may be worthwhile to note that most of the moneyers who were striking similar female obverse types with cruciform earrings between 57 and 52 B.C. had pro-Pompeian or Sullan connections (see, esp. C. 424/1, 426/1 and 3, and 432/1).

Reversing the dates of the moneyerships of Brutus and Cassius is also attractive for another reason that may help us arrive at a more authoritative chronology for the moneyers of the decade between 60 and 50 B.C. As Mommsen correctly records, the observance of a two-year interval, or *biennium*, was required of every curule magistrate running for higher office—a rule that was in effect at least by 180 B.C. as part of the *lex Villia Annalis*⁵³ and seems to have remained in force down to the late Republic.⁵⁴ Although an appointment to the position of *triumvir monetalis* does not seem to have been a prerequisite to curule office, there is a pattern in the careers of those moneyers who went on to hold curule magistracies with a one-year interval between the year in which they served as moneyer and any higher office. While this one-year interval does not correspond to any known law, such as the *biennium* of the *lex Villia Annalis*, it makes sense because anyone aspiring for higher office had to stand for that office *in toga candida*, as a private citizen, and not while holding any other public office.⁵⁵ Because Brutus was quaestor in 53 B.C. and Cassius was quaestor in 52, if we move Brutus's moneyership to 55 and Cassius's to 54, this one-year interval occurs in the careers of both men, as it does in the careers of many of the moneyers in this period. (1) After moving the date of the moneyership of P. Hypsaeus from 60 to 57 B.C., this one-year interval occurs before his praetorship in 55 B.C. (2) M. Scaurus, minted coins as curule aedile in 58 (Cic., *Sest.* 116) and then went on to hold the praetorship in 56.⁵⁶ (3) Faustus Sulla and C. Memmius went on to hold the offices of quaestor and tribune of the plebs, respectively, in 54, two years after they held their moneyerships in 56. (4) Q. Rufus's tribunate in 52 followed two years after his moneyership in 54. (5) S. Sulpicius, although he went on

⁵³ Livy 40.44.1; Cic., *Off.* 2.17.59, *Fam.* 10.25.2, *Phil.* 5.17.47; Tac., *Ann.* 11.22.

⁵⁴ Mommsen (above, n. 48), p. 526; A. E. Astin, "The Lex Annalis before Sulla," *Latomus* 16 (1957), pp. 588–613, continued in 17 (1958), pp. 49–64.

⁵⁵ As Astin demonstrates (above, n. 54), p. 593, in the period of 200 to 180 B.C., before the *biennium* of the *lex Villia Annalis*, of 20 men reaching their first praetorship, where the dates of both curule aedileship and praetorship are known for certain, 16 had a one-year interval between these two offices. Of the other four, three had intervals of two years and the odd one had an interval of 15 years.

⁵⁶ While this case seems to violate the *biennium* rule, there must have been special exemptions granted in the late Republic; see also L. R. Taylor, "Caesar's Early Career," *ClassPhil* 36 (1941), pp. 113–32, esp. p. 126.

to hold no known curule office, was conscripted into the senate in 49 two years after his moneyership in 51. (6) P. Cornelius Marcellinus's quaestorship in 48 followed two years after his moneyership in 50. Based on this pattern we might move the issues of C. Piso L. f. Frugi (C. 408), dated by Hersh and Walker to 61, to 60 based on the fact that he held his quaestorship in 58. Similarly we might move the issues of C. Calvus (C. 437), dated by Crawford to 51 B.C., and by Hersh and Walker and Rockman to 53, to 52 based on the year of his quaestorship in 50.⁵⁷

Based on the hoard evidence, stylistic analysis, the historical record, and the one-year interval between moneyership and curule office, we arrive at the following chronology of the moneyers of 60 to 50 B.C. as presented in Table 5.

TABLE 5

Chronology of Moneyers 60–50 B.C.

<i>C.</i>	<i>Date</i>	<i>Moneyer</i>	<i>Curule Office and Year</i>	<i>Fem. Obv. Type</i>
408	60	C. Piso Frugi	Q. 58	
413	60	L. Longinus		
412	59	L. Fabatus		
422	58	M. Scaurus/ P. Hypsaeus	Pr. 56	
419	58	M. Lepidus		
418	58	M. Piso Frugi		
411	58	L. Torquatus		
405	57	M. Cestianus		
421	57	M. Sufenas		
425	57	L. Philippus		
420	57	P. Hypsaeus	Pr. 55	Leuconoe
424	56	C. Nonianus*		Venus
426	56	Faustus Sulla	Q. 54	Diana
427	56	C. Memmius	Tr. Pl. 54	Ceres
410	56	Q. Musa*		
430	55	P. Crassus*		Venus

⁵⁷ This proposition was offered by Charles Hersh in support of the theory of the one-year interval between moneyership and further office.

429	55	P. Capito*		
431	55	A. Plautius		
432	55	Cn. Plancius*		Macedonia (?)
433	55	M. Brutus	Q. 53	Libertas
428	54	Q. Cassius	Q. 52	Libertas
434	54	Q. Rufus	Tr. Pl. 52	
423	53	C. Servilius*		Flora
435	53	M. Messalla		
437	52	C. Caldus	Q. 50	
436	52	L. Vinicius		Concordia
438	51	S. Sulpicius*	(Senator 49)	
439	50	P. Marcellinus	Q. 48	

* Moneyers who did not later hold any curule office.

FESTIVE ISSUES OF GALERIUS FROM THE TETRARCHIC MINT OF SISCIA

(PLATE 10)

PETER KOS

During the period of the tetrarchies and the following tense years of rivalry between various imperial partners the typology of the post-reform aes nummi seems, at least at first glance, to be stereotypic and monotonous. A detailed analysis of the coin types according to the historical context, however, unravels a very specific meaning of the messages which were sent to the general audience by the ruling participants of the turbulent years between 294 and 313, particularly from 307, through the choice of coin types and accompanying legends. Sutherland has stated that the coinage of the period under discussion, which has often been regarded as being in "sterile and rigid contrast with the excessive laxity of third-century issues," can offer a detailed reflection of the imperial structure.¹ He himself has shown and ingeniously interpreted the historical importance of even slight variations in the selection of coin types and legends.²

Since the publication of the sixth volume of *RIC* the structure of the aes coinage of this period as well as the relative chronological assignment of various issues are considered to be in general definitive and

¹ C. H. V. Sutherland, "Some Political Notions in Coin Types between 294 and 313," *JRS* 53 (1963), p. 20.

² Sutherland (above, n. 1), pp. 14-20. C. H. V. Sutherland, *The Roman Imperial Coinage*, vol. 6 (London, 1967), p. 109 (hereafter, *RIC*).

their interpretation soundly grounded. It was expected that specimens with new mintmarks would occur which could slightly change the relative chronological sequence of issues, or that minor variations in the reading of legends would be documented, but it was believed that coins exhibiting major novelties in the typology could hardly be expected. However, two such unpublished aes nummi of the mint of Siscia were recently acquired by the Coin Cabinet of the National Museum in Ljubljana. One is a follis of Galerius with the obverse legend **IMP MAXIMIANVS P F AVG** (bust right) and with a unique reverse. It shows Victory marching right with a trophy over her left shoulder and palm wreath in her right hand. The legend reads **VICTORIA-A AVGG ET CAESS**; in the exergue **SIS**. The weight of the specimen is 7.07 g and the diameter of its dotted circle is 24 mm (Plate 10, 1). At approximately the same time I had the opportunity to document a follis with a similarly styled portrait of Galerius and the same obverse legend **IMP MAXIMIANVS P F AVG**, in a private collection in Sisak, Croatia. A trophy with two sitting captives is depicted on the reverse and the legend reads **VIRTVS AVGG ET CAESS**, with **SIS** in the exergue. Regrettably, it was not possible to photograph or weigh the second specimen of which only a rubbing could be quickly made (Plate 10, 2).

The selection of the reverse types in the Siscia mint was conventional during the first and second tetrarchies for the central imperial mints (Rome, Ticinum, Aquileia, and Siscia). The reverse legend **GENIO POPVLI ROMANI** alternated with **SACRA MONET AVGG ET CAESS NOSTR** during the first tetrarchy,³ emphasizing the universal significance of Diocletian's currency reform and the concept of unity of the empire. During the second tetrarchy the reverse legends **HERCVLI VICTORI**, **CONCORDIA IMPERII**, **IOVI CONSERVAT**, and **PERPETVITAS AVGG** were added to the previous ones, thus reflecting the personality of the members of the second tetrarchy and also the rivalry and tension among them. **PROVIDENTIA DEORVM QVIES AVGG** was reserved for both senior augusti. After the introduction of the reduced nummi in the

³ A. Jeločnik, "The Alternation of Genio and Moneta Folles in the Siscia Mint," *Actes du 8ème congrès international de numismatique, New York-Washington 1973* (Paris-Bâle, 1976), pp. 315–26, convincingly proposed a new sequence of aes issues of the first tetrarchy.

mint of Siscia the basic types were **GENIO AVGVSTI** and **GENIO CAESARIS**, thus indicating that the mint of Siscia was now related in its conventions and behavior to the Balkan (Heraclea, Thessalonica, Serdica) and Asia Minor (Nicomedia, Cyzicus) group of mints.⁴

It can be seen that both specimens are absolutely unique not merely within the system of the Siscia mint but, furthermore, in the aes currency system of the period. The uniqueness of both specimens is determined by the reverse types and legends and, above all, by the very simple mint mark **SIS** in the exergue. The problem, therefore, is the relative chronological placement of both specimens and the significance of their production.

Jeločnik has clearly shown that the reduced folles were issued in Siscia in two successive series:⁵ whereas the folles of the first series which were struck in three officinae were defined by a wider dotted circle (24 mm), the folles of the second series were characterized by a narrower dotted circle (22 mm) and were struck in six officinae. The weight of the first specimen (7.07 g) and the diameter of the dotted circle on both specimens (24 mm) indicate that both must have been minted after the reduction of the folles had been introduced in the mint of Siscia and that both represent the first series of the reduced nummi.

It is generally agreed that the activity of the mint of Siscia was temporarily suspended after the defeat of Severus in March/April 307⁶ when the last unreduced folles were struck.⁷ According to Sutherland the mint reopened only after Licinius's elevation to Augustus at the meeting in Carnuntum in November 308⁸ or at the very beginning of 309.⁹ According to Jeločnik, November 308 must to be taken as the latest possible date for the commencement of the striking of reduced folles, but he concedes the possibility that the minting of the reduced nummi could have been introduced even some months earlier.¹⁰ Bruun,

⁴ *RIC*, p. 53.

⁵ A. Jeločnik, *The Centur Hoard: Folles of Mazentius and of the Tetrarchy*, Situla 12 (Ljubljana, 1973), p. 154 (hereafter, Jeločnik).

⁶ D. Kienast, *Römische Kaisertabelle* (Darstadt, 1990), p. 286.

⁷ *RIC*, p. 451.

⁸ *RIC*, pp. 451 and 477.

⁹ *RIC*, p. 53.

¹⁰ Jeločnik, p. 154.

however, reassigns the reactivation of the mint of Siscia to the very end of 308.¹¹

Both specimens are further chronologically determined by the reverse legends ending with **AVGG ET CAESS**, clearly indicating that they must have been minted at a time when two augusti were officially ruling the empire, i.e. after the new ruling order was established by the Carnuntum conference on November 11, 308,¹² and Licinius was elevated to the rank of Augustus.¹³

A simple mint mark usually suggests the operation of a mint in only one officina. However, such simple mint marks are always characteristic only for the very first aes issues of the first tetrarchy in the mints of Londinium (LON), Treveri (TR), Ticinum (T), Aquileia (AQ), Roma (R), Siscia (S), Nicomedia (SMN), and Cyzicus (KV).¹⁴ I believe, therefore, that both nummi with the reverse legends **VICTORIA AVGG ET CAESS** and **VIRTUS AVGG ET CAESS** and with the simple mint mark **SIS** represent the initial issues of the reduced nummi after a long span of nearly 20 months during which the mint was not active. Bruun's argument¹⁵ that the reactivation of the mint began with the production of the nummus of Galerius with the reverse legend **GENIO AVGVSTI** and the unique mint mark **SISu** (Plate 10, 3) must be rejected.¹⁶ This should rather be regarded as the succeeding emission.

In the mint of Thessalonica which closed in 303 with the issue **GENIO POPVLI ROMANI** and reopened after the elevation of Licinius, it can be seen that the first issues were **GENIO AVGVSTI** and **GENIO CAESARIS**.¹⁷ In the mint of Serdica, which was the main mint of Ga-

¹¹ P. Bruun, "Centur Revisited. Notes on the Aes Coinage of the Mint of Siscia under Licinius (AD 308–313)," *Studia Numismatica Labacensia Alexandro Jeločnik Oblata* (Ljubljana, 1988), p. 131 (hereafter, "Centur Revisited").

¹² For discussion of the conference in Carnuntum, see Jeločnik, p. 153, and P. Bruun, "The Negotiations of the Conference of Carnuntum," *NAC* 8, 1979, pp. 255–78.

¹³ H. Chantraine, "Die Erhebung des Licinius zum Augustus," *Hermes* 110 (1982), pp. 477–87.

¹⁴ *RIC*, pp. 123 (Londinium), 179 (Treveri), 283 (Ticinum), 313 (Aquileia), 355 (Rome), 463 (Siscia), 556 (Nicomedia), and 579 (Cyzicus).

¹⁵ "Centur Revisited," p. 131.

¹⁶ A. Jeločnik - P. Kos, *The Centur-C Hoard. Folles of Maxentius and of the Tetrarchy*, Situla 23 (Ljubljana, 1983), p. 76, 449.

¹⁷ *RIC*, 30a–32b.

lerius before and during the conference of Carnuntum,¹⁸ the **GENIO AVGVSTI** issue also immediately followed the **GENIO POPVLI ROMANI** emission.¹⁹ The issues **VICTORIA AVGG ET CAESS** and **VIRTVS AVGG ET CAES** are in this respect intrusions in the tetrarchic aes coinage system, the more so because of the presence of a very simple mint mark. Both issues must therefore be regarded as intrusive exceptional festive issues of this Licinian mint, honoring Galerius as senior augustus and reflecting the grateful attitude of the newly promoted Licinius towards Galerius.

Both reverse legends are unusual and unique. **VIRTVS AVGG ET CAESS** is documented only for the mint of Siscia, and that was on aurei of Severus and Maximinus of the period from 306 to 307 and accompanied by different reverse types.²⁰ **VICTORIA AVGG ET CAESS** is unknown in the currency system of the period under discussion but the reverse legend **VICTORIA AVGG** appears, again, only on aurei of Maximinus of the mint of Siscia issued after 311 and with a different reverse type as that on aes nummus.²¹ Could there be any particular reason for such distinctive uniqueness in the selection of types for these Siscian aes nummi?

The results of the conference in Carnuntum, held on Galerius's initiative under the auspices of Diocletian,²² were doubtless regarded as a strong and decisive victory of Galerius's diplomatic skill. In spite of the unsuccessful Italian campaign against Maxentius in the preceeding period he succeeded, at least for a short time, in reestablishing the tetrarchic order according to his own plans which he had earlier failed to accomplish on the battlefield. Maximian was denied the right to rule actively, Maximinus and Constantine were to remain caesars, and Galerius's protégée Licinius was appointed augustus without previously having been caesar. It is to this diplomatic victory that the reverse legend **VICTORIA AVGG ET CAESS** obviously refers. Victory with trophy and wreath, an unknown and therefore exceptional type in the currency system of the tetrarchies, clearly reflects the triumphant feel-

¹⁸ Bruun, "Centur Revisited," p. 131.

¹⁹ *RIC* pp. 497–500.

²⁰ *RIC*, 153–55.

²¹ *RIC*, 219.

²² For details, see Chantraine (above, n. 13).

ings of both augusti, Galerius and Licinius. The significance of the event was underlined by the **VIRTVS AVGG ET CAESS** issue, again showing the triumphant scene, a trophy with two captives.

Since Siscia, as the administrative center of Savia which was together with the other Pannonian provinces assigned to Licinius by the Carnuntum conference, became his chief mint, it is reasonable to expect that in this mint the festive aes issues for Galerius, the senior augustus, were struck after a long period of idleness when the mint had been closed as a result of Maxentius's revolt and the extension of his power eastwards. Maxentius, however, never effectively possessed the mint itself.

The concern for the outcome of the conference particularly in Pannonia and the relief with which Siscia, after long months of threat from Maxentius, greeted its conclusion are reflected in a broad spectrum of reverse types on the gold coinage, in contrast to the mints of Thessalonica, Heraclea, Nicomedia, and Cyzicus where gold coins were scarcely minted immediately after the creation of a new ruling order. Simultaneously with both festive aes issues under discussion, among others, the reverse legends **VIRTVS AVGG** presenting the new Augustus as the peaceful possessor of military power,²³ and **SECVRITAS AVGG** with quadriga type, which may reflect the formal entry of Licinius into Siscia,²⁴ appear on gold coins.

Jeločnik suggested by analogy with the mints of Serdica, Cyzicus, Antioch, and Alexandria the possibility of the minting of reduced folles in Siscia without Licinius some months before his rise, i.e. before November 11, 308.²⁵ Both specimens forcefully contradict the assumption that reduced nummi had been struck before the elevation of Licinius, since the minting of both coins must be placed at the very beginning of the coining of reduced nummi, i.e. immediately after the reopening of the mint. A very simple mint mark indicates striking in only one officina and indirectly predicates that the span of idleness of the mint had been significant and lasted well over an entire year. The evidence offered by both specimens, therefore, clearly rejects the effectuation of reduction in Siscia earlier than November 308.

²³ *RIC*, 197.

²⁴ *RIC*, 195.

²⁵ Jeločnik, p. 153.

The portrait on both specimens, however, stylistically differs considerably from the portrait of Galerius on the supposedly first reduced nummi, which shows a massive head of Galerius with an emphasized lower part of the face and lower jaw (Plate 10, 3). For Bruun this was a sign that at that time Licinius was not yet in charge of the central empire, and only when Licinius took over the administration would the portraits of Galerius become contaminated by the features of Licinius.²⁶ I believe, however, that the analysis of the development of the portrait's execution is overstressed and that there is no sound argument in favor of the reopening of the Siscia mint at a time when Licinius was not yet in charge of Pannonia.

The supposedly new issue of reduced nummi with the reverse legend **GENIO AVGVSTI** and with a developed mint mark but still minted in only one officina²⁷ must therefore be a representative of a successive issue to both festive issues under discussion. It preceded the issue **GENIO AVGVSTI**, struck in three officinae,²⁸ which was later followed by an issue minted in six officinae.²⁹ I propose, therefore, in parallel to the simple and logical progressive development of mint marks during the first tetrarchy,³⁰ the following system of aes issues after the reopening of the Siscia mint in November 308.

Sequence of Issues

<i>Issue</i>	<i>Mint mark</i>	<i>Reverse type</i>
1	SIS	VICTORIA AVGG ET CAESS
2	SIS	VIRTVS AVGG ET CAESS
3(?)	SIS _u	GENIO AVGVSTI
4	SIS _u A-Γ	GENIO AVGVSTI
5	SIS _u A-S	GENIO AVGVSTI

²⁶ Bruun, "Centur Revisited," p. 132.

²⁷ Jeločnik-Kos. (above, n. 16), p. 38, however, warned that the existence of this new emission must be confirmed by more specimens.

²⁸ *RIC*, 198–200.

²⁹ *RIC*, 207–209.

³⁰ Jeločnik (above, n. 3), p. 320.




Numismatic evidence leads to the conclusion that the mint of Siscia resumed its operation with the introduction of the reduction immediately after Licinius took charge of Pannonia which he must have honored with his personal presence in Siscia. It was on that occasion that the aurei of the **SECVRITAS AVGG** type were minted and both festive aes issues were released into circulation.

HERACLIAN COUNTERMARKS ON COINS FOUND AT CAESAREA

(PLATE 10)

JANE DEROSE EVANS

The Byzantine coins from the Drew Institute of Archaeological Research excavations of Caesarea Maritima frequently display countermarks, strengthening previous suggestions that countermarking probably occurred in Syria, Lebanon, or Palestine.¹

The two most frequently found countermarks consist of a simple monogram, set in a circular or slightly oval punch. The letters are h, P or R, found sometimes in combination with C, standing for Heraclius. The HRC countermark can be formed as , with a large punch of 9–10 m or, less commonly, as  with a slightly smaller punch of 7 m. The HP [sic] countermark,  is placed within a punch of 8–9 m.

Grierson, in the catalogue of the Dumbarton Oaks collection, breaks the ligatured countermarks which concern us into two groups, which he

¹ A. R. Bellinger and P. Grierson, eds., *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection*, vol. 2, *Phocas-Theodosius II*, pt. 1 (Washington, 1968), p. 59 (hereafter, *DOC*) and P. Grierson, *Byzantine Coins* (Berkeley, 1982), pp. 121–22, though the latter does not mention Palestine; C. Morisson, *Catalogue des monnaies byzantines de la Bibliothèque Nationale*, vol. 1 (Paris, 1970), p. 259; W. Hahn, *Moneta Imperii Byzantini* 1, 2, 3, *Denkschriften der Oesterreichischen Akademie der Wissenschaften, Philosophisch-historische Klasse* 109, 119, 148 (Vienna 1973, 1975, and 1981), 3, p. 111–12 (hereafter, *MIB*). I wish to thank W. Hahn and W. Metcalf, who offered advice on the manuscript.

calls E and F. His class E consists of the **HRC** or **HR** countermarks, and his class F, of **HP** or **HR**. He differentiates the **HR** of classes E and F by stating that the class F monogram is "slightly larger and bolder."² Although he never states it explicitly, he implies that class F monograms are rarer than class E monograms.³ More recently, Hahn lists two varieties, his 1b, the **HP** form and 1a, the **HRC** form, which we will return to presently.⁴

Of the Byzantine coins found at Caesarea, 29 carry countermarks. Ten, possibly 12, coins bear countermarks of the **HP** or **HR** form (Hahn's type 1b and part of Grierson's class E and all of his class F). All are placed on the reverses of coins. Grierson suggests that the countermarks were "virtually confined to folles" and were placed on half-folles "only by accident."⁵ Although most of the Caesarean examples are folles, the group includes three half-folles and two three-quarter folles, which may argue that the lesser denominations were more carefully marked than Grierson believed.

All of the **HP** or **HR** countermarks (Hahn type 1b) are placed on coins minted during the reign of Heraclius, specifically the years 629–40. In fact, all but two date to 629–31: one coin dates to 632/3, and one to 634–40. The countermarks, which may be placed twice or even three times on the reverse, are found on coins already overstruck and are sometimes seen in conjunction with the **HRC** countermark (see Table 3). Grierson has proposed a date of 629/30 for the countermarking; Hahn, 640/1, when Heraclius restored the coins to a heavier standard.⁶ This is a coherent group, placed on the coins around 634, and the coins seem to have been struck, overstruck, and countermarked within a six year span, ca. 634–40.

² *DOC*, p. 56.

³ See Grierson, *Byzantine Coins*, pp. 121–22, where he does not differentiate between class E or F, but does add that the **HRC** monogram is the most common.

⁴ *MIB* 3, pp. 111–12. His type 2 countermark is not found on any of the coins excavated at Caesarea.

⁵ *DOC*, p. 54.

⁶ *DOC*, p. 56, and Grierson, *Byzantine Coins*, pp. 121–22; *MIB* 3, pp. 111–12.

TABLE 1

Coins with Hahn 1b Countermarks, $\frac{1}{2}$ or $\frac{3}{4}$ *Heraclius*

1. Follis 612/3, Constantinople,⁷ 2 cms.
2. Follis 634/5, Constantinople⁸
3. Half follis 629–31, Constantinople, overstruck on class 5 half follis, 629–31, 72.C.5.56.2
4. Three-quarter follis 629/30, Constantinople, overstruck on ?K 74.C.15.53.3, Plate 10, 1 (photographs of the three illustrated coins courtesy of R. Bull, Director, DIAR, Drew University, Madison, NJ; P. Lampinen, numismatist)
5. Follis 629/30, Constantinople, overstruck on 611/2 M, 74.C.15.28.3, 2 cms., Plate 10, 2
6. Three-quarter follis 629/30, Constantinople, 74.C.15.56.4
7. Follis 629–30, not seen by author, 76.A.5.64.1, 2 cms.?
8. Half-follis 629–31, Constantinople, overstruck on M 624–39, 74.C.15.0.1
9. Half-follis 629/30, Thessalonica, 72.C.3.70.1, 2 cms.
10. Follis 631–40, overstruck on uncertain; HR, struck over type 1b cm.; one non-Heraclian cm.; not seen by author, 76.A.6.208.1

The second Heraclian countermark found at Caesarea is the HRC form, Hahn's type 1a, and part of Grierson's class E. These countermarks are always found on folles, 16 of which were found at Caesarea. Most occur on the reverses, although there are four examples on obverses (see Table 2). Twice the countermark obliterates Maurice's face, while usually on Heraclius's obverses it carefully leaves his name and face intact. Interestingly, on one coin of Maurice, where the countermark is placed on the reverse, his face has been defaced with chisel cuts. Five other countermarked coins of Maurice show no defacement, nor does the coin of Justin I from Caesarea.

This group of coins has a broader chronological span. The earliest coin with this countermark is a follis of Justin I, but more common are

⁷ D. Ariel, "The Coins," in L. Levine and E. Netzer, eds., *Excavations at Caesarea Maritima, 1975, 1976, 1979: Final Report*, Qedem 21 (Jerusalem, 1986), p. 143, 77.

⁸ See above, n. 7, p. 143, 78.

folles of Maurice and early folles of Heraclius, the latest being the same coin that provided the terminus for the type 1b countermark.

Grierson suggests that the type 1a and 1b countermarks were placed on the coins during the wars with the Persians in the Middle East, though he declines naming the specific reason why they occur. If they were placed on the coins to reassert Byzantine authority in regions recaptured from the Persians, he argues, we might expect to see more of them. He suggests that Heraclius specifically countermarked Maurice's coins and that they were the products of the newly closed mint in Antioch. He discounts an economic reason for the HR type, since it was placed on the already reformed coins of Heraclius's years 20 and 21.⁹ Finally, he suggests that the coins were countermarked, taken to Constantinople for restriking, and countermarked yet again when the coins were returned to the local areas for distribution.¹⁰

Hahn suggests an economic motive for the countermarking—to assure users that the heavy and light coins circulated at the same value—and he further links these countermarks to the stylistically similar countermarks found on coins in Cyprus.¹¹

The countermarks should probably be connected to the Persian Wars, and the dates mesh nicely with the independent evidence of the coin types. All of Palestine was engulfed in the struggle for control between the Muslim and Christian armies, and Caesarea alternated between Persian and Byzantine control in the years 614–40; after 640, Caesarea remained in Muslim hands.¹² Very few Byzantine coins are found in Caesarea from the succeeding decades.

It seems probable that countermark 1a, HR, was in use around 630, being superceded by type 1b in 634; countermark 1a is sometimes found with the type 1b countermark (see Table 3). Two crucial coins, 73.C.9.0.1 and 72.C.2.102.3, have both countermarks placed over the

⁹ *DOC*, p. 59.

¹⁰ *DOC*, p. 60.

¹¹ *MIB* 3, pp. 11–12.

¹² See K. Holum et al., *King Herod's Dream: Caesarea on the Sea* (New York, 1988), pp. 202–3.

types and can be dated to 632/3 and 634–40, respectively.¹³ Further, I would argue that the countermarking was done in a Palestinian city—Jerusalem, Tiberias, or probably Caesarea itself, given the number of countermarked coins found here.

TABLE 2

Coins with HRC or Type 1a Countermarks,  

Justin I

1. Follis 518–27, Constantinople?, 84.C.18.178.56

Maurice

2. Follis obv. 582–602, Constantinople, obliterates face, broken die, 74.C.15.28.2
3. Follis 582–602, Constantinople, 71.A.2.21.8
4. Follis 582–602, lost, not seen by author, 74.C.99.0.1
5. Follis obv. 588/9, Constantinople, face defaced with chisel marks, 80.C.25.150.27
6. Follis 586/7, Antioch, 72.B.4.28.2
7. Follis obv. 591/2, Constantinople, obliterates face, 84.G.17.20.6
8. Follis 599/600, Constantinople, 72.C.4.59.1
9. Half-follis 601/2, Thessalonica, 74.C.15.51.2, Plate 10, 3

Heraclius

10. Follis obv. 610–13, Constantinople?, leaves name intact, 74.C.15.51.1
11. Follis obv. 611/2, Nicomedia, overstruck on Phocas; cm. over Heraclius type, 72.A.4.12.1

¹³ Grierson suggests a much earlier date for his class E (the HRC or HR type) countermark, as he found a follis in Cambridge of Heraclius's year 3 (613) overstruck onto an already overstruck coin (*DOC* 2.1, p. 56). This would suggest a long period of use for the countermark. Hahn, who saw the coin, remarks that "die Reihenfolge der Prägung darauf nunmehr als unsicher bezeichnet, während [T. R. Volk] selbst die Kontermarke für später hält" (*MIB* 3, p. 111, n. 61). The Malha hoard, mentioned by Grierson in *DOC*, p. 56, was buried in 630 or 631, and it has coins with Grierson's class E countermarks. Unfortunately, he does not give the forms of the countermarks. If they correspond to Hahn's type 1a, HRC only, then the dating is consistent with the date of the countermark I have suggested. Most of the countermarked coins in the hoard were issued during the reign of Maurice.

12. Follis 611/2, Constantinople, 74.C.15.28.1
13. Class 5 follis 629–40, Constantinople, overstruck on Justin II M ?, 72.C.2.34.5
14. Follis 631/2, Constantinople, overstruck on Phocas ?, 72.A.1.31.3

Comparanda

1. Justinian follis, Antioch, *Bibliothèque Nationale*, p. 291, 10/Ch/AE/11
2. Tiberius II follis, Thessalonica, *MIB*, vol. 2, p. 15, 1a1
3. Maurice follis obv., Hahn, communication
4. Maurice follis, Antioch, *DOC*, vol. 2, pt. 1, 313
5. Heraclius class 1 follis 610–14, Cyzicus, *MIB*, vol. 2, p. 15, 1a2

TABLE 3

Coins with 1a and 1b Countermarks

Heraclius

1. 1b and 1a, follis, 613, Constantinople¹⁴
2. 1b and 1a, follis 632/3, Constantinople, overstruck ?, both cms. imposed over rev. type, 73.C.9.0.1
3. 1b and 1a, follis 634–40, Constantinople, overstruck, both cms. imposed over rev. type, 72.C.2.102.3

Comparanda of Heraclius

1. 1b ? of ca. 7 m and HR of 9 m, class 5 follis, 634/5, Constantinople, overstruck on Maurice M, Constantinople, “contremarque plus ancienne,” *Bibliothèque Nationale*, p. 291, 10/Ch/AE/12, cm. over rev. type
2. 1a, class 5 follis obv., 629–640; rev. with type 1b, uncertain mint, *MIB* 2, p. 15, 1a3
3. HR and 1a ?, follis, 619/20, Constantinople, *MIB* 2, p. 15, 1c2
4. 1b and 1a, class 5 follis, Constantinople, *DOC*, vol. 2, pt. 1, 315

A much rarer type of countermark appears on three coins from Caesarea: an eagle with upraised wings with a pellet between the wings is in

¹⁴ Ariel (above, n. 7), p. 143, 79.

a circular punch 8 mm in diameter.¹⁵ All are placed at approximately the same place on the reverses of folles, obscuring the officina but carefully avoiding disfiguring the M or mintmark. The three examples are all early sixth-century folles, from the reign of Justin I, the combined reign of Justin I and Justinian, and Justinian alone. In all cases, the coins are worn and the countermarks are fresh.

Only six other examples of this countermark are known, two of which have been found in the excavation of Nag Hammadi in Egypt and another was said to have been obtained in Egypt.¹⁶ All of these examples are also found on the reverses of folles, and the folles are again dated to the early sixth century, none post-dating the reign of Justinian. Bendall, who first published the countermark, suggests that it was applied not long after the last coin had been minted, that is, around 540; he further suggests that the countermark was applied in Egypt and had some "local significance."¹⁷

Hahn connects the eagle to a rare three-nummi type, minted in Alexandria, suggesting even that the coins and the countermarks were made with the same die. He dates the countermark to the Heraclian period, partly because this is the period when countermarks were first applied and partly because the eagle motif would have been copied from the consular scepter on coins of Tiberius II, Maurice, and Phocas (though no such coins circulated in Egypt), and was common on seventh century lead seals. He suggests a date early in Heraclius's reign, between 613–17, for the countermarking, and argues that it was done in Alexandria.¹⁸

Coins from Alexandria are not common in Caesarea until the reign of Heraclius (excluding for the moment the problematical I B do-

¹⁵ S. Bendall, "An 'Eagle' Countermark on Sixth-Century Byzantine Coins," *NC* 136 (1976), p. 230, lists one with eagle standing l., head r.; the other two listed have the eagle standing r. I am not sure how Bendall distinguishes them, as the eagles seem to be standing frontally; in the three from Caesarea, the heads are turned r.

¹⁶ J. Goehring, "Two New Examples of the Byzantine 'Eagle' Countermark," *NC* 143 (1983), pp. 218–20; W. Hahn, "Alexandrian 3-Nummi and 1-Nummus Types under Heraclius," *NC* 138 (1978), pp. 181–83.

¹⁷ Bendall (above, n. 15), p. 230.

¹⁸ Hahn (above, n. 16), pp. 181–83; Goehring (above, n. 16), p. 218, agrees.

decanummi supposedly minted under Phocas). But it is precisely coins of 613–18, especially hexanummi, that appear in the excavations from the mint of Alexandria, perhaps confirming Hahn's argument.

TABLE 4

Coins from Caesarea with Eagle Countermark on Reverse

1. Justin I follis, 518–27, Constantinople; 80.C.26.136.16
2. Justin I-Justinian I follis, 518–38, Constantinople; 71.B.1.130.23
3. Justinian I follis, 527–38, uncertain mint; 80.G.10.153.16
4. Justinian I follis, 527–38, Antioch; 84.C.5.152.1

THE DĀBŪYID ISPAHBADS OF ṬABARISTĀN

(PLATES 11-17)

HODGE MEHDI MALEK

For just over a century after most of Iran had been conquered by the Arabs, Ṭabaristān (roughly present-day Māzandarān in northeastern Iran), protected by difficult and mountainous terrain, remained autonomous under the rule of the Dābūyid Ispahbads.¹ The core of the Ispah-

¹ For description and discussion of the extent of Ṭabaristān in this period see: H. L. Rabino di Borgomale, *Māzandarān and Astārabād*, Gibb Memorial New Series 8 (1928), pp. 1-9; *EI*, s.v. "Māzandarān" (Vasmer); J. C. Häntzsch, "Ṭabaristān," *ZDMG* 20 (1866), p. 186; W. Barthold, *A Historical Geography of Iran*, trans. S. Soucek (Princeton, 1984), chapt. 15; Le G. Strange, *The Lands of the Eastern Caliphate* (Cambridge, 1930, rpt. 1966), chapt. 26; E. Rehatsek, "The Baw and Gaobarah Sephabuds along the Southern Caspian Shores," *JBBRAS* 12 (1876), pp. 410-45, is a somewhat dated analysis, covering both geography and history; M. Rekaya, "La place des provinces sud-Caspiennes dans l'histoire de l'Iran de la conquête Arabe à l'avenement des Zaydites (16-250 H/637-864 J. C.): particularisme regional ou rôle 'national'?" *RSO* 48 (1973-74), pp. 117-52. For an excellent summary of the history of the period covered by this article see: W. Madelung, "The Minor Dynasties of Northern Iran," *Cambridge History of Iran*, ed. R. N. Frye (1985), vol. 4, chapt. 6, and *EP*, s.v. "Ispahbadh" (Bosworth). The title Ispahbad, adopted by the rulers of Ṭabaristān in the period immediately following the fall of the bulk of the Sasanian empire, literally means military commander. The title is derived from Achaemenid times, during which the Spadhapati was the commander-in-chief of the army. In the later Sasanian period the empire was divided into four military areas each with its own Ispahbad (Spahpat or Spāhbed), see P. Gignoux, "Le Spāhbed des Sassanides à l'Islam," *Jerusalem Studies in Arabic and Islam* 13 (1990), pp. 1-14. For transcription and transliteration of Pahlavi letters as generally used in this article see D. N. Mackenzie, *A Concise Pahlavi Dictionary* (1971).

bad domain was the lowlands of Ṭabaristān and Rūyān, while their control over the highlands of Ṭabaristān, Daylam, and Gīlān was for much of the time no more than nominal, being ruled on a local level by the minor dynasties of Bāwand and Qārenwand Ispahbads, who recognised at least nominally the overlordship of the Dābūyid Ispahbads. The history of Ṭabaristān under the Ispahbads in the period from the death of the last Sasanian king, Yazdgard III (A.D. 632–51) (Yazdgird) to the final defeat and death of the Ispahbad Khurshīd in about 144 H. (A.D. 761) is shrouded in obscurity. For a picture of the events in this period reliance has to be placed on texts which are a mixture of fact and legend.

Numismatics clearly has an important role in the search for an accurate and coherent analysis of the period, for coins provide contemporary evidence of a more or less reliable nature to place alongside the texts of the chroniclers. However numismatists in the past have led themselves into serious error in analyzing the coinage in isolation from and disregarding the historical sources. Nineteenth century numismatists² by misreading the dates on the coins of Khurshīd, who ruled from 123 H. to about 144 H. (A.D. 740–61), split his rule into two rulers: Khurshīd I who ruled before Farrukhān, and Khurshīd II who ruled after him. Unvala³ split the rule of Farrukhān into two rulers, Farrox and Farroxān, even though there was no historical evidence to support his view.

² For example A. D. Mordtmann, "Münzen von Ṭabaristān," *ZDMG* 8 (1854), pp. 172–80; 12 (1858), pp. 54–56; 19 (1865), pp. 474–96; 33 (1879), pp. 110–12; J. Marquart, *Erahsahr nach der Geographie des Ps. Moses Xorenci* (Berlin, 1901), pp. 131–33; W. H. Valentine, *Sassanian Coins* (1921), pp. 106–8. R. Vasmer (above, n. 1), p. 429, was probably the first to point out that the assumption of a Khurshīd I, who reigned in the 60s of the Ṭabaristān era (PYE) was quite unfounded.

³ J. M. Unvala, *Coins of Tabaristān and Some Sassanian Coins from Susa* (Paris, 1938), pp. 7, 8, and 32. In *El*, suppl., s.v. "Farrukhān," M. Rekaya has convincingly demonstrated the falsity of Unvala's analysis. Ibn Isfandiyār, Ṣahīr, and Khwāndamīr in their local chronicles all spell the name of this Ispahbad as فَرَّحَان, which may be transcribed either as Farrukhān or Farkhān; the latter reflecting more closely the Farsi pronunciation, whereas the former reflects the tashdid (importing a double consonant) above the second letter. Seal evidence indicates that there may well have been a fire temple in Ṭabaristān named Ādur-Farrukhān. It may be that Farrukhān took his name from this fire temple as suggested by A. D. H. Bivar, "Questions of Interpretation in the inscriptions of the Sasanian Seals," *Acta Antiqua Academiae Scientiarum Hungaricae* 28 (1983), at p. 211.

Much of what is known about the Ispahbads is derived from the following Persian texts: Ibn Isfandiyār, *Ta'rikh-i Tabaristān* (written ca. 613 H.; A.D. 1216) based on earlier texts, in the main since lost; Mir Ṣahīr al-Dīn-i Mar'ashhī, *Ta'rikh-i Tabaristān wa Rūyān wa Māzandarān* (written ca. 880 H.; A.D. 1476); and Ghiyās al-Dīn Khwandamīr, *Ta'rikh-i Habīb al-Siyar* based substantially on Mir Ṣahīr al-Dīn's work.⁴ In addition there are the works of the Arab historians, which provide detail particularly in relation to the numerous conflicts between the Ispahbads and the Arabs during the latter's attempts to conquer Ṭabaristān.⁵

Although the Persian texts are not entirely consistent as regards the dates of the reigns of the Ispahbad rulers, they do more or less agree on their names and sequence.⁶ The sequence with the Farsi rendering of each Ispahbad اسپهبد as set out in Ṣahīr's text is:

1. Farrukhān Gīlānshāh جیلان شاه
2. Gīl Gāwbāra جیل گادباره
3. Dābūya دابویه
4. Farrukhān فرغان

⁴ *Ta'rikh-i Tabaristān*, abr. and trans. E. G. Browne, Gibbs Memorial Series, vol. 2 (Leiden and London, 1905); Persian text, ed. 'Abbās Iqbāl (Tehran, undated, ca. 1941). *Ta'rikh-i Tabaristān wa Rūyān wa Māzandarān* (Tehran, 1966), cited in this article; B. Dorn's edition of this text, *Shīr-Eddīn's Geschichte von Tabaristan, Rujan und Masanderan* (St. Petersburg, 1850) has recently been reprinted in Persian together with the German introduction (Tehran, 1984). *Ta'rikh-i-Habīb al-Siyar* 2 (Tehran, SH 1333).

⁵ The principal Arab sources are: al-Ṭabarī, *Ta'rikh al-rusul wa'l-mulūk*, ed. M. J. de Goeje (Leiden, 1879–1901); ibn al-Athīr, *al-Kāmil fī al-Ta'rikh*, ed. C. Tornberg (Leiden, 1851–76; Beirut, 1967); al-Balādhurī, *Futūh al-Buldān*, ed. Ṣalāḥ al-Dīn al-Munajjid (Cairo, 1957). For English translations of al-Ṭabarī's work see *The History of al-Ṭabarī*, ed. E. Yarshater (New York, 1987–) and *The Early 'Abbāsī Empire Volume 1: The Reign of Abū Ja'far al Mansūr AD 754–775*, trans. J. A. Williams (Cambridge, Eng., 1988).

⁶ See for example Ṣahīr's list, p. 158. Where the local chroniclers differ is in identifying the name of the uncle of Khurshīd who ruled during Khurshīd's minority. According to ibn Isfandiyār, Persian text, pp. 109–10, the regent was Farrukhān Kūchek. P. Gignoux, *Noms propres sasanides en Moyen-Perse épigraphique*, *Iranische Personennamenbuch* 2 (Vienna, 1986) has transcribed from Middle Persian the names of the later Ispahbads who minted coins: 4. Farrox, Farroxān (352, 354), 5. Dād-Burz-Mīhr (281), and 7. Xvaršēd (1039).

5. Dād-bürzmihr (Dāzmihr) داذمير
6. Sārūya (regent for Khurshīd) سارويه
7. Khurshīd خورشيد

Only the last three rulers (Farrukhān, Dād-bürzmihr, and Khurshīd) issued coins beginning in 93 H. (A.D. 711). The coins are all dated from the commencement of the solar year following the death of Yazdgard III on 11 June 652. This dating system, the Post-Yazdgard Era (PYE),⁷ enables the reigns of these later Ispahbads to be fixed with some precision.

THE EARLY ISPAHBADS

Much of what is written by the local chroniclers about the early Ispahbads is little more than mythology. Farrukhān Gīlānshāh, who ruled from Amul,⁸ was Ispahbad of Ṭabaristān during the Arab conquest of the bulk of Iran during the caliphate of 'Umar in 22 H. (A.D. 643). Although he enjoyed some degree of autonomy over Ṭabaristān, he showed his allegiance to the Sasanian king Yazdgard III and sent contingents to the battle of Nihavand in 21 H. (A.D. 642) at which the Sasanians suffered the heavy blow from which they never recovered. The Arabs followed up their victory with an attempt to subdue Ṭabari-

⁷ J. Walker, *A Catalogue of the Arab-Sassanian Coins - British Museum* (1941, reprinted 1967), pp. xxvii and lxx; however F. D. J. Paruck, "Mint-marks on Sasanian and Arab-Sasanian coins," *JNSI* 6 (1944), pp. 79-151, at p. 85, considered that the new era was reckoned from the New Year's day which preceded the death of Yazdgard III, ie. 12 June 651. Walker's view is generally considered to be correct. See Table I below for a comparison of the three eras: PYE (used on the coinage), Hijra (used in the historical texts) and A.D. See also E. Bickerman, "Time-Reckoning," *Cambridge History of Iran*, ed. E. Yarshater (1983), vol. 3 (2), chapt. 21 (a).

⁸ For the treatment of Farrukhān Gīlānshāh's reign by the historical sources see: ibn Isfandiyār (above, n. 4), p. 97; al-Ṭabarī, ed. de Goeje (above, n. 5), 1, pp. 2,657-60, 2,835-39; 2, p. 1, 322. The local chroniclers referred to this ruler as Gīlānshāh and say very little about his rule. Al-Ṭabarī recorded the campaigns of Suwayd and Sa'īd. For a useful discussion of Farrukhān Gīlānshāh's reign see Rekaya (above, n. 3), pp. 297-98. Āmul appears to have been a major town in Sasanian times also: see *EP*, s.v. "Āmul" (Lockhart); C. E. Bosworth, "Āmol," *Encyclopaedia Iranica*, ed. E. Yarshater (New York, 1987), vol. 2, p. 980, and A. A. Dehkoda, *Logat-Nama* 1 (Teheran), p. 178.

stān. However the campaign of Suwayd ibn 'Amr ibn Muḳarrin in the following year, 22 H. (A.D. 643), some sources say 18 H. (A.D. 639), met with little success. Although the Ispahbad agreed to pay tribute of 500,000 drachms (dirhams) a year to the Arabs, this was considerably less than the amount formerly paid to the Sasanians and within a short time the Ispahbads fell into arrears. The Arabs soon attacked Ṭabaristān again. During the Caliphate of 'Uthman an unsuccessful expedition was led by the governor of Kūfa, Sa'id ibn al-'Aṣ in about 30 H. (A.D. 651 or a year earlier) and met with fierce resistance by Farrukhān Gīlānshāh.

The local chroniclers do not indicate the length of Farrukhān's rule or state when he died. However they relate that his son Gīl Gāwbāra seized control of Daylam and Gīlān and raised an army there for the purpose of invading Ṭabaristān.⁹ Farrukhān Gīlānshāh was presumably deposed and Yazdgard III recognized Gīl Gāwbāra's rule by vesting him with the title Gīl Gīlān, Padhish-Khwārdjarshāh, and ordering the Sasanian governor of Ṭabaristān to relinquish his government to Gīl Gāwbāra. This is probably a legendary account and it is likely that Gīl Gāwbāra did not succeed his father until long after Yazdgard III's death in 31 H. (A.D. 651). Ibn Isfandiyār dated the rise to power of Gīl Gāwbāra to the thirty-fifth year of the new Persian era which, if what

⁹ For the treatment of Gīl Gāwbāra's reign by the local chroniclers: ibn Isfandiyār, pp. 97–98; Ṣahīr, p. 100; Kwādamīr, p. 403. All agree that he ruled for 15 years, and Khwādamīr (probably inaccurately) placed his death in 40 H. (A. D. 660). See also H. L. Rabino di Borgomale, "Les dynasties du Māzandaran," *Journal Asiatique* 228 (1936), pp. 438–43, which covers in brief each of the Ispahbads from Gīl Gāwbāra to Khurshīd. A. D. H. Bivar in correspondence with the author has expressed the view that it is likely that the first three Ispahbads listed by ibn Isfandiyār result from misunderstandings of legendary material. It appears to him that Gīl Gāwbāra has nothing to do with the historical Ispahbads, but is a confused memory of Darius's weapon-bearer Gobyras, who was described in the inscription on Darius's grave as a Patishchorian (i.e. someone from Patishkhvagar or the Caspian Region). Bivar suspects ancient memories of his fame lingered on in the region, although of course it is possible that he had a later namesake at the end of the Sasanian period. The author agrees with Bivar's assessment of Gīl Gāwbāra: the accounts of his exploits appear to be legendary and the date given by ibn Isfandiyār for his rise to power is inconsistent with the account of his taking power during the reign of Yazdgard III. For references to Gobyras, see M. A. Dandamaev, *A Political History of the Achaemenid Empire*, trans. W. J. Vogelsang (Leiden, 1989), pp. 104 and 179.

was meant was PYE, would be 46 H. (A.D. 666). The local chroniclers state that Gīl Gāwbāra ruled for 15 years and it is conceivable that his rule did not commence until as late as 62 H. (A.D. 681). They paint a legendary picture of a mighty ruler, who defeated the Turks, brought under his rule all Gīlān and Daylam, and built magnificent castles and buildings. It is clear that little reliance can be placed on the factual accuracy of the local chroniclers.

Meanwhile the Arabs continued their campaigns to conquer Ṭabaristān. During the Caliphate of Mu'āwiya in about 42 H. (A.D. 662), or 54 H. (A.D. 673), Maṣqalah ibn Hubayrah al-Shaybāni led a disastrous campaign into Ṭabaristān, which resulted in his death along with a large number of his soldiers.¹⁰ This was followed by another campaign in about 61–64 H. (A.D. 680–83) which resulted in the defeat of the Kūfan general Muhammad ibn al-Ash'ath al Kindī,¹¹ who had been appointed as the notional governor of Ṭabaristān by 'Ubaidallāh ibn Yazīd, the governor of Kūfa.

Gāwbāra had two sons, Dābūya and Pādhūspān, and the former succeeded his father on the throne of Gīlān, while the latter reigned over Rūyān. The dynasty of the Ispahbads of Ṭabaristān took its name from Dābūya, claiming descent from the Sasanian king Jāmāsp (A.D. 497–99), the son of Pērōz (A.D. 459–84). Whether based on fact or not, the claim gave an appearance of legitimacy. Dābūya is said to have ruled for 16 years and his rule was regarded severe and cruel.¹² He was

¹⁰ Described by ibn Isfandiyār, p. 100, who placed this campaign during the rule of the Ispahbad Farrukhān, whose reign did not actually commence until much later in about A. D. 711 (93 H.; PYE 60). Also narrated by al-Bāladhurī (above, n. 5), p. 411, and ibn Hazm, *Jamharat Ansāb al-'Arab*, ed. 'Abd al-Salām Muḥammad Hārūn (Cairo, 1962), p. 321; al-Ṭabarī, ed. de Goeje, 2, p. 1,322.

¹¹ Madelung (above, n. 1), p. 198; al-Ṭabarī, ed. de Goeje, 2, p. 1, 321; ibn al-Faqīh, *Kitāb al Buldān* (Leiden, 1885), p. 308 (written ca. 289–90 H. [A. D. 902–3], but only known in an abridged version). Subsequently in 77 H. (A. D. 696) Ishaq ibn Muḥammad is said to have entered Ṭabaristān at the head of Kūfan troops, but little is recorded about this episode: see al-Ṭabarī, ed. de Goeje, 2, p. 1,018.

¹² For the treatment of Dābūya's reign by the local chroniclers: ibn Isfandiyār, pp. 98–99; Ṣaḥīḥ, pp. 10–11; Kwāndamīr, p. 403. All agree that he reigned for 16 years. W. Madelung, "Dābūyids," *Encyclopaedia Iranica*, ed. E. Yarshater (New York, forthcoming) considers that both Gīl Gāwbāra and Dābūya ruled during Sa-

succeeded by his son Farrukhān, whose reign on the basis of numismatic and historical evidence probably commenced in about 93 H. (A.D. 711) and certainly no later as the first coins in Farrukhān's name date from this year. Working back from this date and using the length of the reigns provided by the local chroniclers (albeit an unreliable source), the reigns of the early Ispahbads can tentatively be placed as approximately spanning the following dates: 1. Farrukhān Gīlānshāh (no mention of length of reign), from 21 H. (A.D. 642) or sooner to 61 H. (A.D. 680); 2. Gīl Gāwbāra (ruled 15 years), 62–77 H. (A.D. 681–96); 3. Dābūya (ruled 16 years), 77–92 H. (A.D. 696–710).

This chronology does not fit with the account of the local chroniclers of the death of the Khārijite Qaṭarī in the hands of the Ispahbad Farrukhān.¹³ According to al-Ṭabarī, however, who was writing some three centuries before ibn Isfandiyār, Ṣufyān ibn al-Abrad slew Qaṭarī in about 79 H. (A.D. 698) and remained with his army in Damāvand and Ṭabaristān until he was recalled by al-Ḥajjāj in 82 H. (A.D. 701).¹⁴ Ibn Isfandiyār's account of Qaṭarī's death by the sword of Farrukhān seems to be later interpolation.¹⁵

sanian times. This view is based on an interpretation of ibn Isfandiyār's confusing chronology. This interpretation is difficult to reconcile with the dates given by the local chroniclers, who place the rule of these Ispahbads in the period after the death of Yazdgard III.

¹³ According to ibn Isfandiyār (above, n. 4), pp. 101–5, and repeated by Ṣahīr (above, n. 4), p. 11, Farrukhān made a pact with Ṣufyān ibn al-Abrad, who had been sent by al-Ḥajjāj ibn Yūsuf to defeat the rebel Khārejī. Farrukhān would rid him of the Qaṭarī leader in return for freedom from interference from the Arabs. Farrukhān duly decapitated Qaṭarī in single combat and sent the heads of the slain and a portion of the spoils to Ṣufyān, who forwarded them on with an account of the victory to al-Ḥajjāj ibn Yūsuf. Al-Ḥajjāj thereupon sent a messenger to Ṣufyān with an ass's load of gold and an ass's load of dust with the message that the gold was his if he had gained the victory himself, but if otherwise he should cast the dust on his head at the chief cross-roads in the bazaar.

¹⁴ Al-Ṭabarī, ed. de Goeje, 2, pp. 1,018–21. Both versions are set out by Rabino di Borgomale, "Les Prefets du Califat an Tabaristān," *Journal Asiatique* 231 (1939), p. 242. For the version of al-Ya'qūbī see *EP*, s.v. "Katari" (Levi Della Vida).

¹⁵ One possibility is that a pact was made by Ṣufyān but with a different Ispahbad, Dābūya, who at least assisted in the defeat of Qaṭarī. According to al-Ṭabarī, ed. de Goeje, 2, p. 1,021, the Ispahbad also assisted the Umayyads by surrendering in 83 H. (A.D. 702) the rebel 'Umar ibn Abi'l-Ṣalt, who had sought refuge in Ṭabaristān.

THE LATER ISPAHBADS

Farrukhān





Farrukhān the Great (دوالمناقب) Zwālmenagheb, the doubly excellent) had a successful rule of 17 years according to the local chroniclers. He expanded his domain as far as Nīshāpūr and repulsed the Arab invaders. In the course of this prosperous rule the town of Sārī is said to have been founded, supposedly named after his son Sārūya who, according to some sources, later ruled as regent during the minority of Khurshīd.¹⁶

While governor of Iraq and Khurāsān, in 98 H. (A.D. 716) Yazīd ibn al-Muhallab led a campaign against Ṭabaristān in which, according to ibn Isfandiyār, he was heavily defeated by Farrukhān. Yazīd was only able to extricate himself from the region by paying 300,000 drachms in return for safe passage.¹⁷ In the year following this unsuccessful campaign Yazīd was dismissed from office by the Caliph 'Umar II.

In PYE 60 (A.D. 711–12; 92–93 H.) the first coins of the Ispahbads were issued by Farrukhān (see catalogue, p. 131 below, 1). These were hemidrachms (or rather drachms of half-weight) in silver in the style of the drachms of the great Sasanian king Khusrau II (A.D. 590/1–628). This basic style was adopted by the following two rulers, Dād-būrzmihr and Khurshīd, and subsequently by the 'Abbāsīd governors who later ruled Ṭabaristān. The script of the coinage is in Pahlavi, in contrast with the purely Kūfic coins which had been recently introduced in Iran

¹⁶ For the treatment of Farrukhān's reign by the local chroniclers: ibn Isfandiyār, pp. 99–109; Ṣahīr, p. 11; Kwāndamīr, p. 403. For a useful discussion of the reign see Rekaya (above, n. 3), pp. 298–99. On Sārī see Rabino di Borgomale (above, n. 1), pp. 51–52, and A. A. Dekhoda, *Loghat-Nama* 54 under "Sārī," pp. 78–81. Sārī appears to have been a fortified town under the Sasanians and objects from the Sasanian period have been discovered there in recent years: L. Vanden Berghe, *Archéologie de l'Iran Ancien* (Leiden, 1966), p. 7, and *Cambridge History of Iran*, 3, 2, p. 766 and pl. 101. Ṣahīr's assertion, p. 12, that Sārī was named after Sārūya may well be based on legend, rather than fact. According to Khwāndamīr, p. 403, Sārūya, following the edict of his brother (Farrukhān), founded the town.

¹⁷ Ibn Isfandiyār, pp. 105–08; Ṣahīr, p. 11. However according to al-Ṭabarī, ed. de Goeje, 2, pp. 1,320–21, 1,327–29 it was Farrukhān who had to agree to pay tribute in return for the withdrawal of Yazīd's army.

by the Arabs.¹⁸ To emphasise the Zoroastrian religion of the Ispahbads, on the reverse there is a fire altar flanked by two attendants. On the right of the altar is the word  *tpwlsťn* (Ṭabaristān), indicating the region but not the mint place which was probably either Āmul or Sārī.¹⁹ To the left of the altar is the PYE date which commenced on A.D. 11 June 652. On the obverse to the right of the bust is the name of the Ispahbad ruler and to the left is written  *GDH 'pzwt* (*xvarrah abzūd*)²⁰ broadly translated as "(may his) splendor grow." There is no legend near the rim on Farrukhān's early coinage. However for his later coinage two words are added. Following the coinage of Khusrau II of the regnal years 12–39, in the second quarter near the obverse rim is the word  *'pd* (*abd*, excellent). In the third quarter is  *nyw'* (*nēw*, good).



The catalogue describes the main types of coins known in the names of the Ispahbad rulers and the early 'Abbāsid governors of Ṭabaristān principally by reference to the American Numismatic Society, British

¹⁸ M. L. Bates, "History, Geography and Numismatics in the First Century of Islamic Coinage," *RSN* 65 (1986), pp. 232–33, has pointed out that the coinage of Ṭabaristān began some 13 years after the introduction of Arabic Islamic dirhams in the rest of Iran, quite possibly as a hostile reaction to the new Arabic coinage. In correspondence Dr. Bates has also helpfully expressed the view that these "half-drachms" are really drachms with a weight standard half that of the old seventh-century drachms. Contemporaries referred to these coins as "dirhams weight of five," that is, ten of these dirhams would weigh five mithqals, but they would never have referred to them as half-drachms.

¹⁹ The two principal towns in Ṭabaristān in the period of the Dābūyid Ispahbads were Sārī and Āmul and it is therefore natural to assume that they minted their coins from either or both of these towns. Unvala considered that the coins of the Ispahbads were struck at Sārī and those of the 'Abbāsid governors at Āmul. However according to the local chroniclers, Sārī was not founded under the Ispahbads until the reign of Farrukhān. If this is correct then, at least initially, the coins of Farrukhān were probably minted at Āmul. Once Sārī became the capital of the Ispahbads it is likely that they minted coins from there.

²⁰ See the discussion of the word *abzūd* (*'pzwt*) by B. Dorn, "Nachträge zu den neuen Ansichten in der Pehlewy-Münzkunde," *Mélanges Asiatiques* 3 (1859), pp. 460–75, and J. Olshausen, "Pehlevi Legends on Sassanian Coins," *NC* 11 (1849), pp. 77–78. Aside from the silver coins, anonymous issues in bronze exist with the word *abzūd* in the place of the ruler's name, but these coins are rare: see catalogue below, 22C–22E, and also R. Curiel and R. Gyselen, "Une collection de monnaies de cuivre Arabo-Sasanides," *Studia Iranica* 2 (Paris, 1984), pp. 49–56.

Museum, and Malek collections.²¹ Coins are known to exist in the name of Farrukhān for the following years: PYE 60–63, 65–72, 73–74 (?), 75–77, and 79 (?) (issues 1–20). This is reasonably consistent with the length of his reign given by the local chroniclers of 17 years. Farrukhān, it appears, ruled from 93 to 110 H. (A.D. 711–28; PYE 60–77) and it is conceivable that he ruled for slightly longer until 112 H. (A.D. 730; PYE 79) if indeed Unvala is correct in recording coins dated PYE 79 in the name of Farrukhān (20).

The coins of Farrukhān bear two distinct name spellings. In his early coinage spanning PYE 60 to 72 (perhaps including PYE 73 and 74 according to some of the numismatic literature which refers to rare examples of coins of these dates without illustrations) the name is  *plḥwn* (1–15). The name is subsequently altered, for the later coinage to  *plḥw'n* (16–20) and two words are added, 'pd and *nyw'*. These changes led Unvala to believe that the coinage was of two distinct rulers, Farrox and Farroxān.²² This is probably incorrect for a number of reasons. First the local chroniclers do not refer to two dis-

²¹ Walker's catalogue did not cover the coinage of the Ispahbads on the ground that they were not issued by the Arabs; H. Gaube, *Arabosasanidische Numismatik* (Braunschweig, 1973), pp. 123–34, covered the coinage of the 'Abbāsid governors, but not that of the Ispahbads. Works on Sasanian coins have also left out the series on the ground that they are not Sasanian: F. D. J. Paruck, *Sassanian Coins* (Bombay, 1924); R. Göbl, *Sasanian Numismatics* (Braunschweig, 1968). Only Unvala in his catalogue treated the coinage of the Ispahbads and the early 'Abbāsid governors as a whole, unfortunately his work is hampered by inaccuracies and lack of illustrations. This artificial treatment of Ispahbad as distinct from 'Abbāsid coinage has left Ispahbad coinage largely ignored since Unvala's work in 1938, see Bates (above, n. 18), pp. 232–33. For an article covering both the Ispahbads and 'Abbāsid governors, see C. Azami, "Sekehha-ye Ṭabaristān," *Bar Rasiha-i Ta'rikhi* (Tehran, 1973), pp. 154–94 (who suggests that the regent during Khurshīd's minority was Farrukhān Kūchek and not Sārūya).

²² See above, n. 3. P. Gignoux, "Sur quelques noms propres des sources numismatiques iraniennes," *Proceedings of the First European Conference of Iranian Studies, Part I: Old and Middle Iranian Studies* (Rome 1990), pp. 135–44, at p. 190, does not accept that both legends with such differing coin types represent the same ruler. This view is shared by R. Gyselen and L. Kalus, *Deux trésors monétaires de premier temps de l'Islam* (Paris, 1983), at p. 34. The latter work lists a hoard of 1,519 coins reportedly found at Qamišliyya in about 1960 which spans the Sasanian period to the 'Abbāsid era and includes 31 drachms of the Ispahbads of Ṭabaristān, but no issues of the 'Abbāsid governors for the province of the Ispahbad type.

tinct rulers, but only refer to Farrukhān as having ruled for 17 years. Second, the change in spelling does not necessarily indicate a change in ruler—for example Sasanian coins display quite a variety of spellings of names by the various kings. Third, the additional two words near the rim are not necessarily indicative of a change in ruler as demonstrated by the coinage of Dād-būrzmihr, where there are also two variants.

During Farrukhān's reign the first issue of the conventional Islamic type was struck with the mint name Ṭabaristān, a dirham dated 102 H. (10A). No other conventional Islamic issues with this mint name are known for the Umayyad period. This issue overlaps with the coins dated PYE 69 in Farrukhān's name. The historical sources make no mention of any occupation or invasion of Ṭabaristān by the Umayyads in this year. However there are at least three possible explanations for the issue. First, the issue might reflect a gap in the historical sources and it could have been issued by the Umayyads during a campaign against the Ispahbads or short occupation of Ṭabaristān. Second, the issue might have been minted outside of Ṭabaristān as a form of propaganda emphasizing the Umayyads' claim to the territory. (The fact that the Ispahbads maintained control over Ṭabaristān had not deterred the Umayyads in the past from appointing their own governor over the province.) Third, the Ispahbad ruler himself may have had this issue produced for the purposes of external payments. It is a matter for conjecture which of these three possibilities lies behind the issue, although the third explanation is the most doubtful.

Dād-būrzmihr

Farrukhān was succeeded as Ispahbad of Ṭabaristān by his son Dād-būrzmihr (or Dāzmihr as he is named by ibn Isfandiyār and the other local chroniclers), who ruled for 12 years.²³ Both the local chroniclers and the Arab historians make little mention of this Ispahbad, probably because during his rule there were no further campaigns by the Arabs

²³ For the treatment of Dād-būrzmihr's reign by the local chroniclers: ibn Isfandiyār, pp. 109–10; Ṣahīr, p. 12; Kwāndamīr, p. 403. The Ispahbad's name may be transcribed from his coinage either as Dād-būrzmihr (Gignoux and Bivar) or Dāt-būrzmihr (Walker). The former is adopted here. The name may be transliterated either as *d'ṭbwrcmtr* or *d'ṭbwlcmttr* (Gignoux). The former reading is adopted here.

against Ṭabaristān. According to ibn Isfandiyār, Dād-būrzmihr rebuilt the place of Ispahbads during his untroubled reign.

The numismatic evidence is consistent with Dād-būrzmihr having ruled for about 12 years. Coins are known in his name for the following years: PYE 79, 86–87, and possibly 88 (21–25). The coins dated PYE 79 (21) are rare and no convincing explanation can be found for the gap of 6 years before coins again appeared with the date PYE 86 (coins dated PYE 86 and 87, albeit scarce, are not as rare as those of PYE 79). It may be that it was not necessary to issue coins in this period particularly after the large output of coins dated PYE 75–77 issued in the name of Farrukhān. Another more plausible explanation for this gap of six years is that the reign of Dād-būrzmihr may not have been as trouble free as stated by the local chroniclers. Support for this view may be found in the inscription on a silver vessel in the Hermitage in the name of Dād-būrzmihr which interestingly omits any reference to Ṭabaristān. Gignoux has read the legend on this vessel as follows:

dtbwrcmtr' Y plhw'n'n Y gylgyf'n ḥwl's'n sp'hpt' NPŠH

which he has translated as:

“Propriété de Dād-būrz-Mihr, fils de Farroxān, spāhbed du Gīlīlān, Xorāsān.”²⁴

It is possible that this omission may reflect a loss of control over Ṭabaristān during a period of Dād-būrzmihr's rule. The only authority for coins dated PYE 88 is Unvala who referred to two examples without illustrating them (25). The first coins in the name of his successor, Khurshīd, are dated PYE 89 (26). Dād-būrzmihr on the basis of the numismatic material ruled from PYE 79–88, 112 to 122 H. (A.D. 730–39) and may in fact have ruled for slightly longer as PYE 77 is the last year of coins known to have been issued in the name of Farrukhān.

Dād-būrzmihr's coins dated PYE 79 follow closely the pattern of Farrukhān's second coinage, save that to the right of the bust on the obverse is the name of Ispahbad *dtbwrcmtr'* (Dād-būrzmihr) in place of Farrukhān's name (21). With Dād-būrzmihr's coins dated PYE 86 and 87 the word *nyw'* (good) is omitted from the third quarter of the obverse edge (23–24).

²⁴ Gignoux (above, n. 22), p. 139.

Khurshīd

When Dād-būrzmihr died his son Khurshīd was still a minor. Ibn Isfandiyār states that Dād-būrzmihr had appointed his deaf brother Farrukhān Kūchek to be regent, whereas both Ṣahīr and Kwādamīr record that Sārūya was regent. There is some support for ibn Isfandiyār's statement in that at one stage al-Ṭabarī refers to the deaf Ispahbad, probably a reference to Farrukhān Kūchek.²⁵ The local chroniclers record that the handing over of power to Khurshīd eight years later was strenuously opposed by the regent's own sons who sought to take over the reigns of government for themselves. Finally Khurshīd defeated his cousins during a battle at Qasr-i-Dadaqan, a place midway between Tamīsha and Sārī.

Ibn Isfandiyār gives a picture of a ruler with great pretensions, who increasingly distanced himself from his subjects by his arrogance and tyranny. It is perhaps not surprising that, when he needed the backing of his people against the onslaught of the Arab armies at the end of his reign, he was unable to muster sufficient support from his own populace to repel the Islamic invaders.²⁶

The Umayyads under their last caliph Marwān II (A.D. 744–50; 123–32 H.) did little more than maintain the status quo. Despite their successes elsewhere they were unable to penetrate the mountains of Ṭabaristān. However, when the army of Abū Muslim entered Ray in

²⁵ Ibn Isfandiyār, ed. Iqbal, p. 170, and al-Ṭabarī, ed. de Goeje, 3, p. 140. I am grateful to Professor Madelung for highlighting these two references: see also Madelung, "Dābūyids" (above, n. 12).

²⁶ For the treatment of the regency and Khurshīd's reign by the local chroniclers: pp. 113–22; Ṣahīr, pp. 12–14; Kwādamīr, pp. 403–4. For an analysis of the reign see *EP*, s.v. "Khurshīd" (Rekaya). Both ibn Isfandiyār and Ṣahīr agree that the regency lasted eight years, only Kwādamīr somewhat implausibly put his regency as lasting 20 years. Ibn Isfandiyār did not record the length of Khurshīd's reign, both Ṣahīr and Kwādamīr put the length of his reign at an incredible 51 years, which is wholly inconsistent with the figure of 119 years given by ibn Isfandiyār and Ṣahīr as the period of the rule of the Ispahbads from Gīlānshāh to the death of Khurshīd. Perhaps the most accurate indication of the length of Khurshīd's rule is given by Ṣahīr, who at one point recorded a rule of 13 years (to which should be added eight years for the regency of Sārūya).

131 H. (A.D. 748) Khurshīd showed his allegiance by giving tribute, but the independence of Ṭabaristān remained intact. The Maṣmughān of Damāvand, having refused to pay tribute, managed to repel Abū Muslim's forces from his territory.²⁷

Khurshīd was soon embroiled in conflict with the 'Abbāsids who succeeded the Umayyads. In 137 H. (A.D. 755) the caliph al-Manṣūr had Abū Muslim executed. This gave the pretext for a major revolt in Khurāsān led by Sunbādh to avenge the blood of Abū Muslim. The revolt and final defeat of Sunbādh is narrated variously in the historical texts.

In al-Ṭabarī's version of events Khurshīd played no role. Sunbādh took Nīshāpūr, Qūmis, and Ray and in the latter town he seized the treasures of Abū Muslim. Al-Manṣūr sent Jahwar ibn Marrār al-'Ijlī at the head of 10,000 men against the rebels and the two forces met between Hamadān and Ray. In the ensuing battle Sunbādh was routed and some 60,000 of his followers were killed. Sunbādh himself was slain between Ṭabaristān and Qūmis by Lawnān al-Ṭabarī. Al-Manṣūr then gave the Ispahbadate of Ṭabaristān to a descendent of Hurmuz ibn al-Farrukhān and sent him there.²⁸ This did not dislodge Khurshīd who continued as Ispahbad, but he did pay tribute to the 'Abbāsids for the time being.²⁹

Ibn Isfandiyār's account of the uprising differs substantially from that of the Arab historians. According to ibn Isfandiyār, Jahwar ibn Marrār defeated Sunbādh in a battle at Jurjunbānī after which Sunbādh

²⁷ Al-Ṭabarī, ed. de Goeje, 2, p. 2,016; Madelung, (above, n. 12), p. 199.

²⁸ Al-Ṭabarī, trans. Williams, pp. 26–27; ed. de Goeje, 3, pp. 119–21. Ibn al-Athīr 4, p. 357, recorded that it was the Ispahbad's agent who killed Sunbādh and the Ispahbad was driven out of Ṭabaristān when he refused to hand over Abū Muslim's treasure. Nizām al-Mulk (d. A.D. 1092), *Siyar al-Mulk or Siyāsāt-nāme*, 2nd ed., trans. H. Darke (1978), pp. 206–7, gives yet another version of Sunbādh's death in the hands of Jahwar at Ray. It is unlikely that the Ispahbad was driven out of Ṭabaristān for anything but a short period, if at all; Khurshīd remained Ispahbad until about A.D. 761 (143/4 H.) and there is no interruption in his coinage during this period. Indeed large numbers of coins have survived from this period: Unvala alone recorded 23 examples for PYE 103 (A.D. 755; 137 H.) and 67 examples for PYE 104 (A.D. 756; 138 H.).

²⁹ Madelung (above, n. 12), p. 199.

took all his possessions and Abū Muslim's treasure to Ṭabaristān. There Sunbādh was met by the Ispahbad's cousin Tus, who killed Sunbādh in an argument. Tus took Sunbādh's head and the property to Khurshīd. Khurshīd broke into open revolt against the 'Abbāsids when the latter demanded the property which had been seized. Finally a compromise was reached, whereby the Ispahbad agreed to pay the same level of tribute as that had been formerly paid to the Sasanian kings. The level of tribute was so large that it is said to have inflamed al-Manṣūr's desire to conquer so rich an area.³⁰

Equally diverse are the accounts of the invasions of Ṭabaristān at the end of Khurshīd's rule. Despite invasion and war it is likely that Khurshīd held onto power until about 143 H. (A.D. 760). Al-Ṭabarī recorded two separate invasions of Ṭabaristān, the first in 141 H. (A.D. 758) when Khurshīd was pre-occupied in a war with his neighbor the Maṣmughān of Damāvand. Troops led by Abū al-Khaṣīb entered Sārī and thereafter the Ispahbad and the Maṣmughān joined forces to deal with the common enemy. The struggle went on for some time before 'Umar ibn al-'Alā was sent with Khāzim ibn Khuzayma to join in the campaign. First Rūyān fell and finally the fortress at al-Ṭāq was surrendered by Khurshīd in return for a guarantee of his safety. In the next year 142 H. (A.D. 759) Khurshīd rose up and slaughtered the Muslims in his territory. Against this threat, al-Manṣūr sent Khāzim ibn Khuzayma and Rawḥ ibn Ḥātim, who together with Abū al-Khaṣīb besieged Khurshīd's fortress. Unable to gain entry to the fortress by military means, they obtained it by stealth. Abū al-Khaṣīb obtained access to the fortress by pretending to join Khurshīd's side and once inside he opened the gates of the city to the 'Abbāsīd forces. Realizing the hopelessness of his situation Khurshīd drank from his poison-filled ring and so committed suicide.³¹

³⁰ Ibn Isfandiyār, pp. 110–13 and 117–19.

³¹ Al-Ṭabarī, trans. Williams, pp. 42–47; ed. de Goeje, 3, pp. 136–40; ibn al-Faqīh (above, n. 11), pp. 275, 305, 310, 311, and 314. Al-Ṭabarī noted that it had also been said that the entry of Rawḥ ibn Ḥātim and Khāzim ibn Khuzayma occurred in 143 H. (A.D. 760–61). Ibn Isfandiyār, p. 122, placed the initial invasion earlier, recording that Ṭabaristān was practically conquered in 140 H. (A.D. 757), in which year Āmul was occupied and the Great Mosque of Sārī built. For an analysis of the period

Ibn Isfandiyār records that the 'Abbāsīd troops gained access to Ṭabaristān by a different form of subterfuge. Al-Manṣūr instructed his son al-Mahdī, who was at Ray, to obtain the Ispahbad's permission for one division of troops, who were short of provisions, to pass through Ṭabaristān. Khurshīd gave his permission, but was betrayed when the 'Abbāsīd troops led by 'Umar ibn al-'Alā attacked and took Āmul. Khurshīd put his family in his fortress at al-Ṭāq and went to Daylam for reinforcements. Khurshīd remained in Daylam for two years and seven months and built up a substantial force. However the fortress, being struck by plague, finally surrendered and Khurshīd's family was taken prisoner. In despair Khurshīd poisoned himself.³²


The local chroniclers do not give any reliable indication of the length of Khurshīd's reign, however the numismatic evidence indicates a rule spanning the period from 123 to 144 H. (A.D. 740 to 760). Large numbers of coins in the name of Khurshīd have survived for the years PYE 89 to 106 (A.D. 740–57; 123–140 H.) (26–43).³³ However for the year PYE 107 there is a marked decrease in the number of known

surrounding the fall of Khurshīd, see R. Vasmer, "Die Eroberung Ṭabaristāns durch die Araber zur Zeit des Chalifen al-Mansūr," *Islamica* 3 (1927), pp. 86–150.

³² Ibn Isfandiyār, pp. 119–22; Ṣahīr, pp. 13–14; Kwāndamīr, p. 404. Al-Ṭabarī's account appears to be contradictory: at one point it is stated that the Ispahbad after his uprising went to Daylam and died there (above, n. 5, Williams, p. 44), later it is indicated that the Ispahbad was at al-Ṭāq (p. 46). Abū 'Abdallāh Yāqūt al-Hamawī (d. A. D. 1228), *Mu'jam al-Buldān* (Beirut, 1955–57), s.v. "al-Ṭāq": the fortress was located in a high valley and only accessible by a long tunnel, hence it was virtually impregnable. After its capture, the treasure contained in the fortress was removed by the Arabs. Yāqūt recites the story of two soldiers, who killed a cat and stuffed rubies from the treasure under its skin. When they threw the stuffed cat down to an accomplice they were seen by an officer, who found the rubies and the thieves were executed. For a discussion on the location of al-Ṭāq, see Vasmer (above, n. 31), pp. 99–150.

³³ The coins dated PYE 107 to 109 were probably issued by Khurshīd, despite the fact that his domain had been attacked by the 'Abbāsīds, as the style of the coins is unchanged from earlier years. The change in style occurs in PYE 110 with the introduction of broad busted coins in Khurshīd's name. If al-Ṭabarī is correct in recording that the first invasion of Ṭabaristān occurred in 141 H., it is probable that the issues dated PYE 107 to 109 were minted neither in Āmul nor Sārī, but elsewhere; however, it is conceivable that some of these issues were minted in Āmul or Sārī as al-Ṭabarī also recorded that for a period in 142 H. Khurshīd managed to repel the invaders and regain control.

specimens, which may be attributed to the first invasion of Ṭabaristān in that year (44). Even scarcer are coins dated PYE 108 and 109 (A.D. 759–60; 142–43 H.), by which time Ṭabaristān had been practically conquered (45–46).

The early coinage of Khurshīd follows closely the style of Dād-būrz-mihr's coins dated PYE 86 and 87, save that to the right of the bust on the obverse is the name of the Ispahbad  *ḥwrsyl'* (Khurshīd) in place of Dād-būrzmihr's name. Numismatists in the past have experienced considerable difficulty in reading the dates which led them to believe that there were in fact two Ispahbads named Khurshīd: one ruling in the sixties of the PYE era and another after Farrukhān.³⁴

THE EARLY 'ABBĀSID GOVERNORS

In PYE 110 (A.D. 761; 144 H.) the style of the coins in the name of Khurshīd was changed.³⁵ The bust on the obverse was broadened and this style continued until PYE 115 (A.D. 766; 149 H.). These are almost certainly posthumous Khurshīd issues minted by the 'Abbāsīd governors of Ṭabaristān. These issues perhaps served as an element of continuity to appease the 'Abbāsīds new subjects in Ṭabaristān. During this period (PYE 110–115) hemidrachms were issued in the name of Rawḥ ibn Ḥātim an officer in al-Manṣūr's armies who became governor of Ṭabaristān. Examples are known of these rare coins dated 146 H. (A.D. 773; PYE 112) and 147 H. (A.D. 774; PYE 113) (53–54). Coins in the name of the next governor Khālīd ibn Barmāk were issued in PYE 115 (A.D. 766; 149 H.) (55). Also during this period coins of the conventional Islamic type were struck in the name of Rawḥ ibn Ḥātim with the mint name Ṭabaristān (54A), although perhaps these were struck in Ray and not in Āmul or Sārī.³⁶

³⁴ See n. 2 above.

³⁵ The coins dated PYE 110 are significantly less scarce than the rare issues of PYE 108 and 109. This increase in output and change in style suggests that the coins of PYE 110 were issued by the 'Abbāsīds.

³⁶ As suggested by R. Curiel, "Sur quelques monnaies des gouverneurs abbassides du Ṭabaristān," *Travaux de l'institut d'études iraniennes* 9 (1979), pp. 151–58, at p. 153.

Coins with Mint Name Ṭabaristān, PYE 110–115

<i>PYE</i>	<i>A.D.</i>	<i>H.</i>	<i>Catalogue</i>	<i>Type</i>
110*	761	144	47	Posthumous Khurshīd
111	762	145	48	Posthumous Khurshīd
112	763	146	49	Posthumous Khurshīd
		146	53	Rawḥ ibn Ḥātim Ispahbad
		146	53A	Conventional Islamic, no governor's name
113	764	147	54	Rawḥ ibn Ḥātim Ispahbad
		147	54A	Rawḥ ibn Ḥātim, conventional Islamic
114	765	148	51	Posthumous Khurshīd
		148	54B	Rawḥ ibn Ḥātim, conventional Islamic
115	766	149	52	Posthumous Khurshīd
115			55	Khālīd ibn Barmak Ispahbad

* Bold type indicates era used on coin.

The coins dated PYE 110 indicate that the 'Abbāsids had full control of Ṭabaristān by 144 H. (A.D. 761). According to ibn Isfandiyār Rawḥ, ibn Ḥātim was appointed governor in 144 H. (A.D. 761), but a year later, being convicted of tyranny and injustice, he was replaced by Khālīd ibn Barmak.³⁷ This chronology is contradicted by the numismatic evidence which indicates a longer period of office. Coins show that Rawḥ ibn Ḥātim was in office at least during the period from 146 H. (A.D. 763) to 148 H. (A.D. 766) and his rule may well have extended into part of 149 H. (A.D. 766), the latter date being the year in which Khālīd ibn Barmak took office. Coins in the name of Khālīd ibn Barmak continued to be struck until PYE 120 (A.D. 771; 155 H.) (55–60). The numismatic evidence also indicates that Khālīd ibn Barmak ruled a little longer than the four years recorded by ibn Isfandiyār.³⁸ Coins are known in the name of this governor for each of the years from PYE 115

³⁷ Ibn Isfandiyār, pp. 123–24.

³⁸ Ibn Isfandiyār, p. 124; Khwāndamīr, p. 406.

to 120 (A.D. 766–71; 149–155 H.); however the rarity of the issues dated PYE 115 and 120 and the overlap with the substantial output of coins dated PYE 120 in the name of the next governor, Umar ibn al-'Ala, indicates that Khālīd ibn Barmak did not rule for the whole of PYE 120 and perhaps for only part of PYE 115. No coins are known in the names of the first three governors of Ṭabaristān, who ruled between 141 H. (A.D. 758) and 145 H. (A.D. 762): Abū al-Khaṣīb, Khāzim ibn Khuzayma, and Abū al-'Abbās Faḍl.³⁹

CONCLUSION

The introduction of coinage in his own name by Farrukhān with coins dated PYE 60 (A.D. 711; 93 H.) was probably a hostile reaction to the recent introduction of conventional Islamic coins by the 'Abbāsids in the rest of Iran. It was natural that Farrukhān would use the style of later Sasanian coinage to reflect his claim to be a legitimate successor to the Sasanian kings and the upholder of the Zoroastrian religion.

Farrukhān's coinage did not draw upon the style of Yazdgard III (A.D. 632–51), who had been defeated by the 'Abbāsids, instead it followed closely that of the great king Khusrau II (A.D. 590/1–628), whose armies ultimately reached as far as Jerusalem. Indeed some of the comparisons between the coinage of these two rulers are remarkable. For example, the headgear of the attendants on the reverse of Khusrau II coins changed in year 11 of his reign; the same change can be seen in PYE 75 of Farrukhān's coinage (16). Also from year 12 of Khusrau II's coinage the word '*pd* (*abd*, excellent) occasionally appears in the second quarter of the obverse near the rim; '*pd* is introduced onto Farrukhān's coins from PYE 75. This latter addition may well have been to mark the military successes of both rulers.

³⁹ For a discussion of the rule of the early 'Abbāsīd governors of Ṭabaristān see H. L. Rabino di Borgomale (above, n. 14), pp. 237–63. The 'Abbāsīd governors continued to strike coins of the Ispahbad type until PYE 143 (A.D. 794; 178 H.). According to ibn Isfandiyār, pp. 122–23, Abū al-Khaṣīb was governor for two years and was succeeded by Khāzim ibn Khuzayma, who was dismissed after only one year and replaced in turn by Rawḥ ibn Ḥātim, who was made governor in 144 H. (A.D. 761). Ibn Isfandiyār did not record the governorship of Abū al-'Abbās Faḍl, who according to Khwāndamīr, p. 406, ruled for one year before being replaced by Rawḥ ibn Ḥātim.

Although the similarities between Farrukhān's coinage and that of Khusrau II are striking, Farrukhān did not slavishly follow Khusrau II's types. First and foremost, the silver hemidrachms (or drachms of half weight) of Farrukhān and his successors were in the region of 2 g in weight, half the weight of Sasanian drachms of 4 g. Second, Farrukhān and the following Ispahbads only issued silver drachms in their own names, no gold or bronze issues are known (save for some rare bronze or copper issues without the name of any Ispahbad; see 22A–E); although Khusrau II also minted coins in gold and copper, these denominations were probably chiefly ceremonial in nature. Third, with Farrukhān's second coinage (PYE 75–77, 79 ?) and Dād-būrzmihr's coins dated PYE 79 there is the additional word *nyw'* (*nēw*, good) on the edge of the obverse which does not appear on Khusrau II's coins at all. The significance of this addition is not certain. On the one hand the word may refer to an attribute of the Ispahbad (i.e. the good ruler), but equally conceivably it may refer to the coinage itself (good coin as opposed to the other types, including conventional Islamic coinage, which were probably also circulating during the period). Fourth, unlike the coinage of the Sasanians all the Ispahbad coins have as an additional feature groups of three pellets between each of the crescents and stars on the reverse rim.

From the beginning of Farrukhān's second coinage in PYE 75 the basic style of the Ispahbad coinage remained frozen. Apart from the removal of the word *nyw'* (*nēw*) in PYE 86 under Dād-būrzmihr and minor variations in crescents, stars, and pellets there was no significant change in style until the introduction of the broad busted type with coins dated PYE 110 in the name of Khurshīd. This latter change most probably reflected the fact that the coins were no longer being issued by the Ispahbads, but by the 'Abbāsids.

It may be strange that the 'Abbāsids continued to strike coins in the name of Khurshīd until PYE 115 and thereafter followed the same basic style for some 30 years. There is no expression of the Islamic faith on these coins, which were entirely in Pahlavi, and the Zoroastrian fire altar with attendants was allowed to remain. It may be that the 'Abbāsid governors followed the coinage of the Ispahbads out of a mixture of political expediency and the practical common sense in adopting a coinage which had established itself in the region where Zoroastrianism continued to be widely practised for some time.

The output of hemidrachms (drachms of half weight) under the Ispahbads was not continuous and varied considerably from year to year. However low output or lack of known examples for some years ought not necessarily be taken as evidencing strife or financial difficulties. After Farrukhān's modest output of coins dated PYE 60 to 69 (none are known for PYE 64), from the number of known examples it appears that few coins were issued between PYE 70 to 74. This may merely indicate that it was considered that by PYE 70 there were sufficient coins in circulation. The large output of coins dated PYE 75 to 77 may be significant and the increase may well have been to finance Farrukhān's successful military campaigns. With this large increase of coins in circulation, Dād-būrzmihr during his peaceful reign may have felt it unnecessary to mint coins at all for the years PYE 80 to 85, after having marked the beginning of his rule with a small mintage of coins in his name dated PYE 79. On the other hand the gap during Dād-būrzmihr's rule may more plausibly reflect a temporary loss of control over Ṭabaristān as indicated by the absence of the province's name on the Hermitage silver vessel. Khurshīd had a relatively consistent output of coins from PYE 89 to 106. The marked decrease in the number of coins between PYE 107 and 109 probably reflects the decline in Khurshīd's rule. Production only picks up in PYE 110, by which time the 'Abbāsids were in control.

With the assistance of the numismatic evidence it has been possible to revise and in some places confirm the chronology of this period in the history of Ṭabaristān as given by the local chroniclers and the Arab historians. Although the local chroniclers and the Arab historians have mixed fact with legend and given accounts which appear in places to be inherently improbable, significant parts of their chronology do seem to be substantially correct. The local chroniclers record that the rule of the Ispahbads, from Gīlānshāh to the death of Khurshīd, lasted 119 years.⁴⁰ This broadly accords with the known facts: in 21 H. (A.D. 642) Gīlānshāh sent contingents to the battle of Nihavand and Khurshīd's death can reliably be placed to about 143/4 H. (A.D. 760/1). The length given for the reigns of Farrukhān and Dād-būrzmihr also accords with numismatic evidence. An approximate chronology for the period

⁴⁰ Ibn Isfandiyār, p. 122; Ṣahīr, pp. 14 and 158.

derived from the evidence provided by the historical texts and the coinage is set out in Table 2 to this article. From a purely numismatic point of view, it is possible to correct and expand on the previous works on the coinage of the Ispahbads, which have been hampered not only by the difficulty of interpreting the dates but also by the neglect of the historical written sources. The coinage, being neither Sasanian nor Islamic, has (since the work of Unvala in 1938) been generally ignored by numismatists. However it is manifest that the series is worthy of study, both by the numismatist and the historian.⁴¹

CATALOGUE

Except where indicated the coins listed are silver hemidrachms, or rather drachms of half-weight, of the Ispahbad type. All of the coins in the ANS, British Museum, and Malek collections are specifically listed, followed by references to issues in other collections. Coins from other collections are allocated numbers only where no examples exist in those three collections. The catalogue is not intended to be an exhaustive list, although all the relevant coins in the ANS, Ashmolean, BM, Fitzwilliam, and Leiden collections have been included. Caution should be used in following Unvala's *Coins of Tabaristān* or other works which have not

⁴¹ The author is grateful to the American Numismatic Society, the Bibliothèque Nationale, and the Trustees of the British Museum for permission to publish coins from their collections (photographs copyright of the ANS, Bibliothèque Nationale, and the British Museum respectively). I have received comments and assistance from numerous persons and institutions in finalizing this article: Dr. M. L. Bates, Dr. M. H. Martin, and Johanna Bergman of the American Numismatic Society; Raymond Herbert of the Smithsonian Institution, Washington; Joe Cribb, Venetia Porter, and Dr. W. A. Oddy of the British Museum; Helen Brown of the Ashmolean Museum; Dr. M. Blackburn of the Fitzwilliam Museum; Dr. A. Fornin of the State Historical Museum, Moscow; Dr. I. G. Dobrovolsky of the Hermitage, Leningrad; Dr. H. Simon of the Staatliche Museen zu Berlin; Dr. B. E. Hovén of the Kungl Myntkabinettet, Stockholm; F. Thierry of the Bibliothèque Nationale, Paris; Dr. L. Illisch of Tübingen University; Professor W. A. Madelung of Oxford University; Dr. A. D. H. Bivar, David Sellwood, Lucille Batmanghelidgh, and Dr. A. A. Malek. Any errors are of course my own. Finally the author would like to thank Mrs. Joy Allen for typing the drafts of this article.

provided illustrations of the coins described. Numismatists have in the past often misread dates on coins of the Ispahbads.⁴²

Collections

ANS	American Numismatic Society
Ashmolean	Ashmolean Museum, Oxford
Baghdad	Iraq Museum, Baghdad
Berlin	Staatliche Museen zu Berlin (before that Kaiser Friedrichs Museen; Königliche Museen)
BM	British Museum, London
Cairo	Egyptian National Library, Cairo
Copenhagen	National Museum of Copenhagen
Fitzwilliam	Fitzwilliam Museum, Cambridge
Hermitage	Hermitage, St. Petersburg ⁴³
Leiden	Het Koninklijk Penningkabinet, Leiden (formerly The Hague)
Malek	Malek, London
Moscow	State Historical Museum, Moscow; includes Paul Zubov collection
Paris	Bibliothèque Nationale, Paris
Qatar	National Museum of Qatar
Stockholm	Kongl. Svenska Myntkabinettet, Stockholm
Unv	Unvala, now in K. R. Cama Oriental Institute, Bombay
Vienna	Kunst-Historisches Museum, Vienna
Yapi	Yapi ve Kredi Bankasi, Turkey

Publications

Curiel. R. Curiel, "Sur quelques monnaies des gouverneurs abbassides du Ṭabaristān," *Travaux de l'institut d'études iraniennes* 9 (Paris, 1979), pp. 151–58.


⁴² A. Guillou's catalogue, *Les monnayages Pehlevi-Arabes* (Paris, 1953), of the coins in the Bibliothèque Nationale is replete with errors. These errors are corrected here and in the review by R. Curiel, *Journal Asiatique* (1954), pp. 121–24.

⁴³ For the history of the Hermitage collection, see P. Griazevich, "Tabaristnskie polydrachmy iz Kolektsii aziatskogo muzeia v sobrani Ermitzha," *Soob G Ermitazh* 33 (1971), pp. 94–100.

- Curiel-Gyselen. R. Curiel and R. Gyselen, *Une Collection de Monnaies de Cuivre Arabo-Sasanides*, *Studia Iranica*, Cahier 2 (Paris, 1984), pp. 49–56.
- Dorn, "Ispehbede." B. Dorn, "Die Pehlewy-Münzen des Asiatischen Museums der Kaiserlichen Akademie der Wissenschaften III Die Münzen der Ispehbede, Chalifen und deren Statthalter," *Mélanges Asiatiques* 2 (1856), pp. 249–63.
- Dorn, "Pehlewy-Münzen." B. Dorn, "Über die letzten dem Asiatischen Museum zugekommenen Pehlewy-Münzen," *Mélanges Asiatiques* 2 (1856), pp. 608–11.
- Dorn, "Pehlewy-Inschriften." B. Dorn, "Sechsendachtig Silbermünzen mit Pehlewy-Inschriften," *Mélanges Asiatiques* 8 (1877), pp. 269–80.
- Gaube. H. Gaube, *Arabosasanidische Numismatik* (Braunschweig, 1973).
- Göbl, *Den Haag*. R. Göbl, *Die Münzen der Sasaniden im Königlichen Münzkabinett, Den Haag* (1962).
- Göbl. R. Göbl, *Sasanian Numismatics* (Braunschweig, 1968).
- Guillou. A. Guillou, *Les Monnayages Pehlevi-Arabs* (Paris, 1953).
- Gyselen-Nègre. R. Gyselen and A. Nègre, "Un Tresor de Gazira," *RN* 24 (1982), pp. 170–205.
- Gyselen-Kalus. R. Gyselen and L. Kalus, *Deux trésors monétaires de premier temps de l'Islam* (Paris, 1983).
- Lavoix. H. Lavoix, *Catalogue des Monnaies Musulmanes de la Bibliothèque Nationale - Khalifes Orientaux* (Paris, 1887).
- Linder. U. S. Linder, "En Upplandsk Silverskatt Fran 800-Talet," *Nordisk Numismatik Arsskrift* (1938), pp. 109–24.
- Malek. H. M. Malek, "The Posthumous Arab-Sasanian Coinage of Khurshid in Tabaristān," *N Circ* 95 (1989), pp. 39–40.
- Markoff. A. de Markoff, *Collection numismatique de l'Institut des Langues Orientales à Saint-Petersbourg - 5e Mémoires. Catalogue des monnaies . . . Dabweihides, ainsi que des pièces frappées par les Ispebeds arabes du Tabaristan* (St. Petersburg, 1889; reprinted Amsterdam, 1971).
- Miles. G. C. Miles, *Rare Islamic Coins*, *ANSNM* 118 (1950).
- Mitchiner. M. Mitchiner, *Oriental Coins and Their Values - The Ancient and Classical World* (1978).
- Mordtmann, "Tabaristān." A. D. Mordtmann, "Münzen von Tabaristān," *ZDMG* 8 (1854), pp. 173–80.

- Mordtmann, "Erklärung." A. D. Mordtmann, "Erklärung der Münzen mit Pehlevi-Legenden," *ZDMG* 12 (1858), pp. 54–56.
- Mordtmann, "Pehlevi-Legenden." A. D. Mordtmann, "Erklärung der Münzen mit Pehlevi-Legenden," *ZDMG* 19 (1865), pp. 474–96.
- Al-Naqshabandi. N. M. Al-Naqshabandi, *The Islamic Dirham*, vol. 1 (Baghdad, 1969).
- Nicol. D. N. Nicol, *Catalog of the Islamic Coins, Glass Weights, Dies and Medals in the Egyptian Library, Cairo* (Malibu, 1982).
- Nutzel. Nutzel, *Katalog der Orientalischen Münzen I - Königliche Museen zu Berlin* (Berlin, 1898).
- Olshausen. J. Olshausen, "Pehlevi Legends on Sassanian Coins," *NC* 11 (1850), pp. 68–92.
- Ostrup. J. Ostrup, *Catalogue des Monnaies Arabes et Turques du Cabinet Royal des Medailles du Musee National de Copenhague* (Copenhagen, 1938).
- Soret. F. J. Soret, "Lettre à M. Justus Olshausen," in *Memoires et Documents publiés par la Société d'Histoire et d'Archéologie de Genève* 5, pt. 2 (1847), pp. 97–110.
- Stickel. J. G. Stickel, *Das Grossherzogliche Orientalische Münzcabinet zu Jena*, vol. 2 (Leipzig, 1870).
- Thomas, "Pehlevi Coins." E. Thomas, "The Pehlevi Coins of the Early Mohammedan Arabs," *JRAS* 12 (1850), pp. 346–47.
- Thomas, "Decipherments." E. Thomas, "Comments on Recent Pehlvi Decipherments," *JRAS*, n.s. 5 (1871), pp. 454–59.
- Numi Cufici*. C. J. Tornberg, *Numi Cufici regii numophylacii Holmiensis-Kongl. Svenska Myntkabinettet* (Upsala, 1848).
- Tornberg, *Symbolae*. C. J. Tornberg, *Symbolae ad rem numarium Muhammedanorum ex Museo regio Holmiensi iii* (Upsala, 1856).
- Tözen. I. Tözen, *Arab-Sasani Paralari II - Yapi ve Kredi Bankasi* (Istanbul, 1975).
- Unvala. J. M. Unvala, *Coins of Tabaristān and Some Sassanian Coins from Susa* (Paris, 1938).
- Unvala, "Supplementary." J. M. Unvala, "Supplementary Notes on the Coins of Tabaristān," *JNSI* 6 (1944), pp. 37–45.
- Walker, *Arab-Sassanian*. J. Walker, *A Catalogue of the Arab-Sassanian Coins-British Museum* (1941).
- Walker, *Arab-Byzantine*. J. Walker, *A Catalogue of the Arab-Byzantine and Post-Reform Umayyad Coins* (London, 1956).

al-Ush. M. F. al-Ush, *Arab Islamic Coins Preserved in the National Museum of Qatar* (Doha, 1984).



The style of the silver coinage of the Ispahbads closely follows drachms with the second crown of the late Sasanian king Khusrau II (A.D. 590/1–628) of regnal years 2–39 (see Göbl, table 12). The mint signature **AM** found on late Sasanian drachms until queen Bōrān (A.D. 630–31) probably represents Āmul in Tabaristān. The headdress of the attendants on the reverse of Khusrau II's drachms for regnal years 1–10 (A) is the same as on Farrukhān's coins for PYE 60–75. The different headdress for regnal years 11–39 (B and C) is the same as Ispahbad issues from PYE 75. From regnal year 12 (B) the word 'pd  occasionally appears in the second quarter of the obverse rim and this is a feature of the Ispahbad issues from Farrukhān's second issue (PYE 75–79). Illustrated here are silver drachms of Khusrau II of each of these types with the mint signature **AM** to the right of the right attendant on the reverse and regnal year to the left of the left attendant.


A	4.03 g	3 cm	Year 4 ANS 1940.209.605. Plate II.
B	3.32 g	2.8 cm	Year 32 'pd in second quarter obv. rim ANS 1002.1.2320. Plate II.
C	3.99 g	3.3 cm	Year 38 Malek. Plate II.

THE COINS

Farrukhān PYE 60–77 or 79

First Series, *Plḥwn* PYE 60–73

Obv: Sasanian bust r. after style of Khusrau II; breast ornament 3 pellets; above l. shoulder, small fillet and rosette; above r. shoulder small crescent and fillet; l. of winged crown, star with 3 pellets below; r. of crown, star and crescent. In l. field *GDH* 'pzwł , in r. field *Plḥwn* . All in double circle of dots; margin divided into 4 quarters by star and crescent at 3, 6, 9, and 12 o'clock.

Rev: Zoroastrian fire altar with flames, attendants on either side; small star l. and crescent r. of flames. In l. field *Tpwlst'n* , in r. date. All in triple circle of dots; margin divided into 4 quarters by star and crescent at 3, 6, 9, and 12 o'clock and further subdivided by triangles of dots.

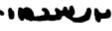
PYE 60/93 H., *šst'* 


No.	Grams	Cms	Description
1.1	2.07	2.3	BM (R. B. Whitehead, 1922): Walker; <i>Arab-Sassanian</i> , p. 130, pl. 23a; Unvala, 12.
1.2	2.08	2.4	Malek. Plate 11.
1.3			Rev. star replaces crescent r. of flames. Unv: Unvala, 1–11.
1.4	2.1	2.2	Clipped. Rev. pellet l. of date. Type illustrated in Unvala, pl. 1, but does not correspond with his description of 1–12. Malek. Plate 11.

Fitzwilliam CM. 316–1993 (2.08 g, 2.3 cm). Qamišliyya hoard (2.1 g); Gyselen and Kalus, 333.

PYE 61/94 H., *'ywsst'* 

2.1	2.02	2.4	Malek. Plate 11.
Unv.; Unvala, 13–20. Date easily confused with 63.			

PYE 62/95 H., *dwšst'* 

3.1	2.09	2.2	Date with pellet. BM; Unvala, 41. Plate 11.
3.2	2.09	2.3	Malek. Plate 11.
3.3	2.06	2.1	Obv. with <i>GDH</i> <i>'pzwł'</i> .  . ANS 1987. 139.1. Plate 11.
3.4	2.13	2.2	ANS 1991.3.289.
Unv.; Unvala, 21–40, same type as 3.3.			

PYE 63/96 H., *sywsst'* 

4.	2.06	2.2	BM (R. B. Whitehead, 1922); Unvala, 56. Plate 11.
Unv.; Unvala, 42–55. Hermitage; Unvala, 56.			

PYE 64/97 H.

5. No coins known. Thomas, *Decipherments*, p. 455, 1, erroneously read as PYE 64 a posthumous issue of Khurshīd dated PYE 114.

PYE 65/98 H., *pnčšst'*  6.1; *pnčst'*  6.2-3

- 6.1 2.06 2.4 BM (J. Ramsay Scott, 1921); Unvala, 73. Plate 11.
 6.2 2.06 2.35 BM (R. B. Whitehead, 1922); Unvala, 72.
 6.3 2.08 2.3 As 6.2. Malek. Plate 11.
 Unv.; Unvala, 58-70. Berlin (2.04 g, 2.3 cm); Nützel, p. 54, 197, erroneously listed as PYE 75, but corrected by Unvala, 71. Qamišliyya hoard (2.05 g); Gyselen and Kalus, 334.

PYE 66/99 H. *šššst* 

- 7.1 2.11 2.3 BM (R. B. Whitehead, 1922); Unvala, 88-90. Plate 11.
 7.2 2.09 2.4 BM (J. Ramsay Scott, 1921); Unvala, 88-90.
 7.3 2.03 2.35 BM (R. B. Whitehead, 1922); Unvala, 88-90.
 7.4 2.05 2.25 Malek.
 Unv.; Unvala, 74-87. Davis; Unvala, 91-2. Madame Godard (Tehran); Unvala, "Supplementary," p. 44, 1.

PYE 67/100 H. *hptšst'*  8.1-2, 8.6; *hpšst'*  8.3; *hpšs'*  8.4; *hptšst*  8.5

- 8.1 2.05 2.35 BM (C. Davies Sherborn, 1936); Unvala, 121-22. Plate 12.
 8.2 2.05 2.45 Malek.
 8.3 2 2.3 BM (J. Ramsay Scott, 1921); Unvala, 121-22. Plate 12.
 8.4 2.02 2.3 Obv. with *GDH 'pzwł'* BM (J. Ramsay Scott, 1921); Unvala, 123. Plate 12.
 8.5 2.06 2.3 Obv. with *GDH 'pzwł'* BM.
 8.6 2.07 2.3 As 8.1. ANS 1957.84.3.

Unvala listed a further 30 examples: Unv., 93-120; Davis, 124; Thorburn, 125. Qamišliyya hoard (2.08 g and 2.06 g); Gyselen and Kalus, 335-36.

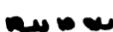
PYE 68/101 H., ḥšššst'  9.1–.4; ḥšššst'  9.5

- 9.1 2.06 2.3 BM (J. Ramsay Scott, 1921); Unvala 173–76. Plate 12.
- 9.2 2.08 2.4 BM (R. B. Whitehead, 1922); Unvala, 173–76.
- 9.3 2.04 2.3 Obv. with *GDH* 'pzw'. BM (J. Ramsay Scott, 1921); Unvala, 173–76. Plate 12.
- 9.4 2.09 2.3 Obv. with *GDH* 'pzw'. BM (J. Ramsay Scott, 1921); Unvala, 173–76.
- 9.5 2.07 2.4 Malek. Plate 12.
- Unv.; Unvala, 126–72. Qamišliyya hoard (2.08 g and 2.07 g); Gyselen and Kalus, 337–38.

PYE 69/102 H., nwšst'  10.1–.2, 10.4–.5; nwšst'  10.3

- 10.1 2.03 2.3 BM (J. Ramsay Scott, 1921); Unvala, 195–97. Plate 12.
- 10.2 2.09 2.35 Malek.
- 10.3 2.04 2.3 Malek. Plate 12.
- 10.4 2.08 2.3 Obv. with *GDH* 'pzw'. BM (J. Ramsay Scott, 1921); Unvala, 195–97. Plate 12.
- 10.5 2.01 2.3 Obv. with *GDH* 'pzw'. BM (J. Ramsay Scott, 1921); Unvala, 195–97.
- Unv.; Unvala, 177–81. Allotte de la Fuÿe; Unvala, 182.

- 10A. There is additionally an Umayyad dirham issue of the conventional Islamic type with mint name Ṭabaristān dated 102 H. Examples of this rare issue have been published. Paris (2.87 g); Lavoix, 440 = Walker, *Arab-Byzantine*, p. 167, P91. Tübingen University Forschungstelle für Islamisches Numismatik (2.84 g, 2.8 cm; ex Steve Album). Sotheby, 21 May 1986, 294 (2.63 g). Peus 333, 6 May 1992, 1016 (2.77 g), Plate 12. The historical sources make no mention of any occupation or invasion of Ṭabaristān by the Umayyads in this year and this issue may well have been minted from outside Ṭabaristān.

PYE 70/103 H., ḥpt'l 

- 11.1 Unv.; Unvala, 198–99, pl. 1.

11.2 2.01 2.2 Obv. with *GDH* 'pzwf'. Malek. Plate 12.
See 22A below for an example of an anonymous bronze issue which has been read as being PYE 70, but is probably better read as PYE 107.

PYE 71/104 H., 'ywkḥpt't 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥

12 2.05 2.3 Obv. with *GDH* 'pzwf'. Paris. Plate 12.

PYE 72/105 H., dwḥpt't 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥 13.1; 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥 13.2–.3

13.1 1.96 2.3 Malek. Plate 12.

13.2 1.85 2.25 Obv. with *GDH* 'pzwf'. Malek. Plate 12.

13.3 2.03 2.3 Obv. as 13.2; rev. as 13.1. Paris. Plate 12.
Subhi Bey; Mordtmann, "Erklärung," p. 54, 307; incorrectly recorded by Unvala, 200, as having later spelling of Farrukhān. Vienna (Zam-baur); Unvala, "Supplementary," p. 41, 41. Baghdad (1.97 g, 2.5 cm); Naqshabandi, p. 141, 73, pl. 5.

PYE 73/106 H.




14 Unvala, 201–2 erroneously referred to two coins of this date listed by Mordtmann, "Ṭabaristān," p. 173, 873, and Thomas, "Decipherments," p. 455, 2, as having the later spelling of Farrukhān (*Plḥw'n*), whereas in fact Mordtmann and Thomas listed the coins as having the earlier spelling (*Plḥwn*). Contrary to Unvala, p. 17, no example in BM. Dorn, "Pehlewy-Inscripfen," p. 279, referred to a coin in the Museum of the St. Petersburg Academy (ex. J. Hornung, Moscow) dated PYE 73 of Farrukhān's second issue. In the absence of adequate illustrations, the existence of issues with this date is unconfirmed.



PYE 74/107 H.

15 2.08 2.4 Baghdad; Naqshabandi, p. 142, 74A. Not illustrated; enquiries of Iraq Museum unsuccessful in tracing coin.

Second Series, *Plḥw'n*, PYE 75–79


Obv: As first series but no fillet above r. shoulder; inner circle of dots interrupted at top l. and r. *Plḥw'n* 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥 'pd 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥 and *nyw'* 𐭪𐭣𐭥𐭥𐭥𐭥𐭥𐭥 in second and third quarter near rim.

Rev: As first series, during PYE 75 change in headgear of attendants from (a)  and  16.1–.3, 16.7 to (b)  16.4–.6; from PYE 76 all issues with (b).

PYE 75/108 H., *pnčhpt't*  16.1–.3, 16.6; *pnčhpt't*  16.4–.5

16.1	1.96	2.3	Holed at l. near rim. BM (Count de Salis, 1862); Walker, <i>Arab-Sassanian</i> , p. 130, pl. 23b; Unvala, 218. Plate 13.
16.2	1.66	2.2	BM (H. L. Rabino, 1949).
16.3	1.95	2.3	Malek.
16.4	2.01	2.45	Malek. Plate 13.
16.5	2.06	2.4	Obv. with <i>GDH 'pzw't</i> . Malek. Plate 13.
16.6	1.93	2.3	ANS 1917.215.122; Unvala, 220.
16.7	1.97	2.4	ANS 1991.3.290.




Baghdad (1.99 g, 2.5 cm; 1.964 g, 2.3 cm; 2.08 g, 2.3 cm); Naqshabandi, 74 (pl. 5), 74B, 74C. Berlin (1.59 g, 2.3 cm); Nützel, 196; Unvala, 211, and a further example, 208. Copenhagen (1.9 g); Ostrup, 91; Unvala, 204. Fitzwilliam CM. 1973–7 (1.93 g, 2.35 cm; as 16.4). Allotte de la Fuÿe; Unvala, 207, 209–10, 212–17. Mitchiner; Mitchiner, 1332–34. Moscow; museum inventory book SHM 91.546/486000–6 (2.1 g, 1.77 g, 1.87 g, 1.94 g holed, 2.02, 1.52 g holed) all presumably ex-Zubov (= Unvala, 221–27). Muracciole, Tehran; Unvala, 228–29. Museum of St. Petersburg Academy; Dorn, “Ispehbede,” p. 259. Hermitage; Dorn, “Ispehbede,” p. 261; Unvala, 205–6. Qamišliyya hoard (1.93 g, 1.91 g, 1.88 g); Gyselen and Kalus, 339–41. Qatar (2 g, 2.32 cm; 2.2 g, 2.35 cm; 2.1 g, 2.4 cm); al-Ush, 142–44. Subhi Bey; Mordtmann, “Pehlevi-Legenden,” p. 474, 171; Unvala, 203. Thorburn; Unvala, 219. Yapi (1.85 g, 2.5 cm); Tozen, 1. Zambaur (Vienna); Unvala, “Supplementary,” p. 41, 2–4.

PYE 76/109 H., *ššhpt't* 



17.1	1.88	2.4	BM (H. L. Rabino, 1909); Unvala, 235.
17.2	2.07	2.5	Malek.
17.3	1.85	2.35	Cracked flan. ANS 1917.215.123; Unvala, 236.
17.4	2.02	2.5	ANS 1957.84.4. Plate 13.

17.5 Obv. with *GDH* 'pzwł'. Zubov, now Moscow; Unvala, 237.

Ashmolean (1.94 g, 2.4 cm; as 17.1); Baghdad (1.963 g, 2.5 cm); Naqshabandi, 75, pl. 5. Berlin (1.95 g, 2.5 cm); Nützel, p. 54, 198; Unvala, 231. Allotte de la Fuÿe; Unvala, 230. Ġazīra hoard; Gyselen and Nègre, p. 193. Hermitage (2.02 g, 2.5 cm); Unvala, 242. Mitchiner; Mitchiner, 1336. De Morgan (1.9 g, 2.4 cm); Guillou, 98. Moscow; museum inventory book SHM 91.546/4860007-12 (1.94 g, 1.61 g damaged, 1.96 g, 2.08 g, 1.79 g, 1.93 g), 5 presumably ex-Zubov (= Unvala, 237-41). Paris (1.88 g, 2.35 cm); Guillou, 99; Unvala, 234. Qamišliyya hoard (1.83 g) Gyselen and Kalus, 342. Stockholm; Tornberg, *Numi Cufici*, p. 121; Unvala, 233. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 5-6.

PYE 77/110 H., *hpthpt' t*  18.1-3.; *hptlthpt' t*  18.4; *hthpt' t*  18.5; *hpthpt' t*  18.6

18.1	1.87	2.4	Holed twice. Rev. crescent l. and r. of flames BM (F. A. Harrison, 1935); Unvala, 256.
18.2	2.06	2.5	Rev. star l. and crescent r. of flames Malek. Plate 13.
18.3	2.1	2.5	As 18.2 ANS 1981.50.1.
18.4			Rev. stars l. and r. of flames. Unv.; Unvala, 246.
18.5		2.4	Rev. star l. and crescent r. of flames. Paris. Plate 13.
18.6	2.07	2.4	Rev. star l. and crescent r. of flames. Malek. Plate 13.

Baghdad (1.814 g, 2.5 cm; type 18.2); Naqshabandi, 76, pl. 5. Berlin (1.88 g, 2.5 cm); Nützel, 199; Unvala, 245. Copenhagen (1.81 g); Ostrup, 70; Unvala, 255. Allotte de la Fuÿe; Unvala, 243-44. Mitchiner, includes two examples with shortened dates as  and ; Mitchiner, 1336-38. Moscow; museum inventory book SHM 91.546/486013-7 (1.67 g, 1.94 g, 1.79 g, 1.98 g, 1.85 g), all presumably ex-Zubov (= Unvala, 250-54). Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," 172-73; Unvala, 247-48. Qamišliyya hoard (1.93 g, 1.90 g, 1.90 g) Gyselen and Kalus, 343-45. Qatar (2.04 g, 2.52 cm); al-Ush, 145. Thorburn; Unvala, 249. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 7.

PYE 78/111 H.




- 19 No coins known. Consistent with rule of 17 years stated by local chroniclers.

PYE 79/112 H., *nḥp't'* 𐎲𐎠𐎡𐎢𐎣 20.1; *nwḥp't'* 𐎲𐎠𐎡𐎢𐎣𐎠𐎡𐎢𐎣 20.2

- | | | |
|------|------|---|
| 20.1 | | Berlin; Unvala, 257. Unvala's reading of the date seems incorrect and this may have been a coin of Umar ibn al-'Alā of PYE 122, <i>wystdwt'</i> . Enquiries of Berlin unsuccessful in tracing coin. |
| 20.2 | 1.99 | Zubov, now Moscow; Unvala, 258; Moscow; museum inventory book SHM 91.546/486018. Enquiries unsuccessful in verifying reading. |

Dād-būrzmihr, PVE 79-88

First Series, PYE 79

Obv: As Farrukhān's second series, no star and crescent to r. of crown.
D'tbwrcmr' . 'pd  and *nyw'*  in second and third quarter near rim.

Rev: As Farrukhān's second series.

PYE 79/112 H., *nwhpt't'* 𐎒𐎗𐎐𐎕𐎗


- 21.1 2.04 2.4 Malek.
21.2 2.09 2.5 ANS 1976.176.1. Plate 13.
Unv.; Unvala, 259



PYE 80-85/113-19 H.

- 22 No silver issues known.
Bronze issues from a private collection published by Curiel and Gyselen, pp. 49–56, include varieties read by them as dated PYE 80. Bronze coins of Ṭabaristān in the Ispahbad period fall into two basic types, neither in the name of any Ispahbad.

Type 1

Obv: Usual bust, to r. *kyf'n* (Kayān?) 𐭪𐭫𐭥, to l. *GDH* 𐭪𐭫𐭥

Rev: Fire altar without attendants, to r. *Tpwlst'n* , to l. date.

PYE 107, *hptst*  22A.1; *hptst'*  22 A.2


22A.1 Private (5.02 g, 1.72 cm; 2.66 g, 1.7 cm; 2.36 g, 1.57 cm; 2.16 g, 1.82 cm; 2.08 g, 1.36 cm); Curiel and Gyselen, 97–101 (read PYE 70).

22A.2 Alishan; Mordtmann, "Pehlevi-Legenden," p. 474, 170 (read PYE 70); Unvala, 800.

PYE 108, *hstst* 

22B. Private (3.27 g, 1.65 cm); Curiel and Gyselen, 102 (read PYE 80). A reading of PYE 107 and 108 for type 1 is preferable to one which gives a 10 year gap.

Type 2

Obv: As type 1 but to r. *'pzw'* 

Rev: No fire altar, *Tpwlst'n* on diagonal, date above

PYE 108, *hstst'* 

22C.1 Private (2.15 g, 1.93 cm; 1.76 g, 1.8 cm); Curiel and Gyselen, 103–4 (read PYE 80).

22C.2 Spink's 31 (Zurich), 20 June 1989, 325 (2.69 g; read PYE 80); Peus 338, 27 Apr. 1994, 818 (read PYE 80). Plate 13.

22C.3 Malek (2.7 g, 1.8 cm).

22C.4 Sotheby, 28 May 1987, 866 (2.69 g; read PYE 160).

PYE 89, *nwhst'l'* 

22D. Private (1.36 g, 1.9 cm); Curiel and Gyselen, 105.

PYE 93, *synwl'*  and 



22E.1 Private (3.29 g, 1.88 cm; 3.05 g, 2.02 cm; 2.88 g, 1.75 cm; 1.95 g, 1.64 cm; 1.62 g, 1.82 cm; 1.57 g, 1.65 cm; 1.49 g, 1.68 cm; 1.27 g, 1.73 cm); Curiel and Gyselen, 106–13.

22E.2 Malek (2.2 g, 1.55 cm). Plate 13.

22E.3 *Classical Numismatic Review* 18, 2 (1993), 412, (2.24 g). Cf. Unvala, 680 (Zubov; read as PYE 130). For an excavation find of this type see S. P. Loginov and A. G. Nikitin, "Post-Sasanian Coins from Merv," *Mesopotamia* 28 (1993), pp. 313–17.

Second Series, PYE 86–88



Obv.: As Dād-būrzmihr's first series, no legend in third quarter near rim; star and crescent to l. of crown.

PYE 86/120 H., *ššhšt' l'*  23.1; *sshst' l'*  23.2–3

23.1 2 2.2 BM (G. le Strange, 1887); Walker, *Arab-Sasanian*, p. 131, pl. 23c; Unvala, 267. Plate 13.

23.2 2.04 2.3 Malek.

23.3 1.80 2.3 ANS 1922.211.10; Unvala, 273. Plate 13. Baghdad (1.994 g, 2.4 cm; type 23.1); Naqshabandi, 77, pl. 5. Berlin; Nützel, 200; Unvala, 260. Allotte de la Fuÿe; Unvala, 261–65. Hermitage; Unvala, 272. Moscow; museum inventory book SHM 91.546/486019–21 (2 g, 1.92 g, 2.07 g), all presumably ex-Zublov (= Unvala, 269–71). Paris (1.69 g, 2.25 cm; type 23.1); Guillou, 100; Unvala, 266. Qamišliyya hoard (1.91 g); Gyselen and Kalus, 346. Smithsonian Institution (type 23.1). Thorburn: Unvala, 268.

PYE 87/12 H., *hpthšt' l'*  24.1–2, 24.4; *hpthšt' l'*  24.3



24.1 1.96 2.4 BM (Seaby, 1957).

24.2 1.95 2.4 Malek.

24.3 2.02 2.3 ANS 1976.176.2. Plate 13.

24.4 1.92 2.35 ANS 1984.189.1. Plate 13.

Allotte de la Fuÿe; Unvala, 274–76. Moscow; museum inventory book SHM 91.456/486022–22 (1.9 g, 2.01 g, 2.03 g, 1.94 g, 1.9 g), all presumably ex-Zubov (= Unvala, 278–82). Smithsonian Institution (type 24.1). Subhi Bey; Mordtmann, “Erklärung,” p. 54, 308; Unvala 277. Zambaur (Vienna); Unvala, “Supplementary,” p. 41, 8.

PYE 88/122 H., *hštšt' l'*  25.1; *hštšt' l'*  25.2

25.1 2.02 Zubov, now Moscow; Unvala, 283; Moscow; museum inventory book SHM 91.546/486027. Enquiries unsuccessful in verifying reading.

- 25.2 Unvala, 284, said to be in the ANS, but no trace. Issues of this date subject to confirmation.

Khurshīd, PYE 89–110

Obv: As Farrukhān's second series, breast ornament of 4 pellets.

Ḥwršyt'  'pd  in second quarter near rim.

Rev: As Farrukhān's second series.

PYE 89/123 H., *nwhšl't*  26.1–.2; *nwhšl't*  26.3–.4


26.1 2.06 2.3 BM (Baldwin, 1974). Plate 13.

26.2 2.00 2.3 Malek.

26.3 1.97 2.3 Paris. Plate 14.

26.4 1.96 2.25 ANS 1917.215.124; Unvala, 292.

East India House (London); Mordtmann, *Ṭabaristān*, p. 173, 874; Unvala, 290. Fitzwilliam (2.01 g, 2.4 cm; as 26.1). Allotte de la Fuÿe; Unvala, 285–89. Hermitage; Unvala, 303. Masson; Thomas, "Pehlevi," p. 347; Unvala, 291. Qamišliyya hoard (1.95 g); Gyselen and Kalus, 347. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 9. Zubov, now Moscow; Unvala, 293–302. For issues erroneously attributed to PYE 89: Naqshabandi, 94,94A; Tözen, 3. See 22D above for anonymous bronze issue dated PYE 89.

PYE 90/124 H., *nwt'* 

27.1 1.88 2.3 BM (Col. Miles, 1890); Walker, *Arab-Sassanian*, p. 131, pl. 23d; Unvala, 311. Plate 14.

27.2 2.05 2.45 Malek.

27.3 2.01 2.35 ANS 1966.126.6.

Ashmolean (1.6 g, 2.3 cm; as 27.1); Baghdad (1.86 g, 2.4 cm); Naqshabandi, 78, pl. 5. Berlin (1.96 g, 2.4 cm); Nützel, 201; Unvala, 308. Davis; Unvala, 312. Allotte de la Fuÿe; Unvala, 304–7. Leiden (1.77 g, 1.9 g); Göbl, *Den Haag*, 254–55. Mitchiner; Mitchiner, 1339. Paris (1.76 g, 2.4 cm); Guillou 101 (erroneously listed as PYE 100); Unvala, 310. Prokesch van Osten; Mordtmann, "Pehlevi-Legenden," p. 475, 174; Unvala, 309. Qamišliyya hoard (2 g, 1.96 g, 1.81 g); Gyselen and Kalus, 348–50. Stockholm; Unvala, 334. Zubov, now Moscow; Unvala, 313–33. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 10.

PYE 91/125 H., 'ywkwt' 𐤕𐤓𐤕𐤕 28.1; 'ywkwt' 𐤕𐤓𐤕𐤕 28.2-5

28.1	1.97	2.4	BM (Pietiasz, 1853); Unvala, 340. Plate 14.
28.2	2.01	2.4	Malek. Plate 14.
28.3	1.85	2.4	ANS 1986.70.13.
28.4	2.09	2.35	ANS 1944.100.51197 (ex E. T. Newell); Unvala, 361.
28.5	1.86	2.25	ANS 1958.222.2.

Baghdad (1.986 g, 2.4 cm); Naqshabandi, 79, pl. 5. Copenhagen; Unvala, 360. Allotte de la Fuÿe; Unvala, 335–38. Jena (1.8 g); Stickel, 57; Unvala, 399. Zambaur (Vienna); Unvala, “Supplementary,” p. 41, 11. Zubov, now Moscow; Unvala, 341–59.

PYE 92/126 H., *dwnwt'* 𐤁𐤍𐤍𐤕' 29.1; *dwnwt'* 𐤁𐤍𐤍𐤕' 29.2–3

29.1 1.6 2.2 BM (Spink, 1946).
 29.2 2.07 2.4 ANS 1981.50.2.
 29.3 1.96 2.4 Malek. Plate 14.

Copenhagen (1.57 g); Ostrup, 92; Unvala, 375. Allotte de la Fuÿe; Unvala, 362–63. Hermitage; Unvala, 376–77. Qamišliyya hoard (2.02 g); Gyselen and Kalus, 351. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 475, 175; Unvala, 364. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 12. Zubov, now Moscow; Unvala, 365–74.

PYE 93/127 H., synt" (synwt") 110 RW

30.1	1.82	2.35	No star or crescent on rev. Malek. Plate 14.
30.2	1.95	2.45	Star r. and crescent l. of flames. ANS 1917.215.125; Unvala, 381. Plate 14.

Asiatic Institute, St. Petersburg; Dorn, p. 261. Zambaur (Vienna); Unvala, 'Supplementary,' p. 41, 13. Zubov, now Moscow; Unvala, 378–80. See 22E above for anonymous bronze issues dated PYE 93.

PYE 94/128 H., čh'lnwt' מלכא דמלכא

31.1	1.95	2.4	Rev. crescent l. and star r. of flames. BM (Mrs. Jacomb, ex Gen. M. Clerk, 1920); Unvala, 387 or 388, as only one coin was in the BM when Unvala compiled his catalogue. Plate 14.
31.2	1.97	2.4	As 31.1. Malek.

31.3	2.08	2.4	As 31.1. ANS 1917.216.3538; Unvala, 390–91.
31.4	2.03	2.4	Obv. no crescent r. of crown. Rev. star l. and crescent r. of flames. Malek. Plate 14.
31.5	2.07	2.3	Rev. star l. and crescent r. of flames. ANS 1944.100.3627 (ex E. T. Newell); Unvala, 418. Plate 14.
31.6	2.08	2.35	Rev. single pellets below star l. and crescent r. of flames. Malek. Plate 14.
31.7	2.07	2.35	As 31.6. BM (Spink, 1945).
31.8	1.89	2.4	As 31.6. Holed. ANS 1991.3.291.
31.9	2.05	2.4	As 31.5. Malek.
31.10	2.06	2.4	Rev. star with pellet below l. and crescent r. of flames. Malek. Plate 14.

Baghdad (1.89 g, 2.5 cm; 1.915 g, 2.4 cm; 1.805 g, 2.4 cm); Naqshabandi, 80 (pl. 5), 80A, 80B. Berlin; Unvala, "Supplementary," p. 44, 1. Copenhagen (1.76 g); Olshausen, p. 89; Mordtmann, "Ṭabaristān," p. 173, 875; Ostrup, 93; Unvala, 386. Allotte de la Fuÿe; Unvala, 382–84. Ġazīra hoard (2 examples); Gyselen and Nègre, p. 193. Leiden (1.8 g); Göbl, *Den Haag*, 256. Mitchiner; Mitchiner, 1340. Muracciole; Unvala, 419. Qamišliyya hoard (2.07 g); Gyselen and Kalus, 352. Rawlinson; Mordtmann "Ṭabaristān," p. 173, 875; Unvala, 385. Stockholm; Tornberg, *Numi Cufici* p. 121, 2; Unvala, 416–17. Yapi (1.95 g, 2.4 cm); Tözen, 2 (erroneously attributed to PYE 114). Ziegler; Unvala, 389. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 14. Zubov, now Moscow; Unvala, 392–415.

PYE 95/129 H., *pnčnwł'* 

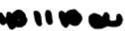
32.1	1.89	2.35	Rev. crescent l. and star r. of flames. BM (P. Ziegler, 1935); Unvala, 466. Plate 14.
32.2	1.82	2.2	Rev. single pellets below star l. and crescent r. of flames. Malek. Plate 14.
32.3	2.11	2.3	As 32.2. ANS 1944.100.51193 (E. T. Newell); Unvala, 469.
32.4	1.94	2.25	Rev. single pellets l. and r. of flames. Malek. Plate 14.

Ashmolean (2 g, 2.3 cm; as 32.2). BM (1.96 g, 2.35 cm), holed, probably as 32.1. Baghdad (1.75 g, 2.3 cm; 1.854 g, 2.4 cm); Naqshabandi, 81 (pl.

5; as 32.2), 81A. Berlin; Unvala "Supplementary," p. 44, 2. Cairo (1.88 g, 2.35 cm); Nicol, 29. Copenhagen; Unvala, 465. Allotte de la Fuÿe; Unvala, 420–25. Hermitage; Unvala, 468. Mitchiner; Mitchiner, 1341 (as 32.2). Prokesch von Osten; Mordtmann, "Pehlevi-Legenden" p. 475, 176 (= Unvala, 427) and p. 486, 77 (= Unvala, 426). Qamišliyya hoard (1.92 g, 1.89 g); Gyselen and Kalus, 353–54. Stockholm; Unvala, 467, possibly an error. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 15–16. Ziegler; Unvala, 428. Zubov, now Moscow; Unvala, 430–64. Unvala, 429, refers to a coin in the ANS, but there is no trace of it in the collection.

PYE 96/130 H., ššnwt' 

- | | | | |
|------|------|------|--|
| 33.1 | 1.6 | 2.3 | Rev. single pellets below star l. and crescent r. of flames. BM (Count de Salis, 1862); Unvala, 472. Plate 14. |
| 33.2 | 1.97 | 2.35 | As 33.1. Malek. |
| 33.3 | 1.94 | 2.35 | As 33.1. Malek. |
| 33.4 | 1.73 | 2.35 | Rev. crescent l. and star r. of flames. BM (Baldwin, 1938). Plate 14. |
| 33.5 | 2.09 | 2.35 | As 33.4. ANS 1944.100.51194 (E. T. Newell); Unvala, 495. |
| 33.6 | 1.99 | 2.3 | As 33.4. ANS 1944.100.51195. |
- Baghdad (1.96 g, 2.5 cm; 1.877 g, 2.4 cm; 1.93 g, 2.4 cm); Naqshabandi, 82 (pl. 5; as 33.1), 82A, 82B. Davis; Unvala, 473. Allotte de la Fuÿe; Unvala, 470. Ismail Pasha; Mordtmann, "Ṭabaristān," p. 173, 876; Unvala, 471. De Morgan (1.85 g, 2.4 cm); Guillou, 108 (erroneously read as PYE 106). Muracciole; Unvala, 496–97. Thorburn; Unvala, 474. Zubov, now Moscow; Unvala, 477–94. Unvala, 475–76 refers to two coins in the ANS, but there is no trace of them in the collection.

PYE 97/131 H., ḥptnwt' 

- | | | | |
|------|------|-----|---|
| 34.1 | 1.87 | 2.5 | Obv. no star l. of crown. Rev. single pellets below star l. and crescent r. of flames. BM (Count de Salis, 1862); Unvala 499. Plate 15. |
| 34.2 | 1.85 | 2.2 | Obv. with star l. of crown. Malek. |
| 34.3 | 1.98 | 2.3 | Obv. as 34.2. Malek. |
| 34.4 | 1.99 | 2.4 | As 34.2. ANS 1944.100.51196 (E. T. Newell); Unvala, 502. Plate 15. |

Cairo; Nicol, 31 (erroneously read as PYE 117). Copenhagen (1.74 g); Ostrup, 94. East India House; Mordtmann, "Ṭabaristān," pp. 173–74, 877; Unvala, 498. Fitzwilliam (2.06 g, 2.4 cm; as 34.2). Hermitage; Unvala, 511. Ismail Pasha; Mordtmann, "Ṭabaristān" pp. 173–74; Unvala, 498. Masson; Thomas, "Pehlevi Coins," p. 347; Unvala, 500. De Morgan (1.78 g, 2.55 cm); Guillou, 109 (as 34.2; erroneously read as PYE 107). Qamišliyya hoard (1.95 g); Gyselen and Kalus, 355. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 17. Zubov, now Moscow; Unvala, 503–10. Unvala, 501, refers to a coin in the ANS, but there is no trace of it in the collection.

PYE 98/132 H., ḥštnwt' 

- | | | | |
|------|------|------|--|
| 35.1 | 1.83 | 2.3 | Obv. no crescent above r. shoulder. Rev. single pellets below star l. and crescent r. of flames. BM (T. W. Armitage, 1956). Plate 15. |
| 35.2 | 2.02 | 2.35 | Obv. crescent above r. shoulder; star l. of crown reduced to pellet. Rev. crescent l. and star r. of flames. BM (L. A. Lawrence, 1935); Unvala, 542. Plate 15. |
| 35.3 | 1.82 | 2.35 | As 35.2. Malek. |
| 35.4 | 1.94 | 2.3 | Obv. crescent above r. shoulder; no star l. of crown. Rev. as 35.1. Malek. Plate 15. |

Baghdad (1.73 g, 2.35 cm); Naqshabandi, 83, pl. 6. Berlin (2.08 g, 2.4 cm); Nützel, 202; Unvala, 514; Unvala, "Supplementary," p. 44, 3 (further example). Allotte de la Fuÿe; Unvala, 515. Hermitage; Unvala, 543–44. Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," p. 475, 177; Unvala, 516. Qamišliyya hoard (1.72 g); Gyselen and Kalus, 356. Unv.; Unvala, 512–13. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 18. Ziegler; Unvala, 519. Zubov, now Moscow; Unvala, 521–41. Unvala, 517–18 refers to two coins in BM, but there is no trace of them in the collection. Unvala, 520 refers to a coin in the ANS, but there is no coin of this date in the collection.

PYE 99/133 H., nwnwt' 

- | | | | |
|------|------|------|--|
| 36.1 | 1.66 | 2.35 | Obv. star l. of crown reduced to pellet. BM (P. Grierson, 1954). Plate 15. |
| 36.2 | 1.73 | 2.25 | Obv. full star l. of crown. Malek. |
| 36.3 | 1.92 | 2.4 | Obv. as 36.2. ANS 1966.126.7. Plate 15. |

Baghdad (1.945 g, 2.5 cm; 1.832 g, 2.4 cm); Naqshabandi, 84 (pl. 6; as 36.1), 84A. Berlin (1.84 g, 2.35 cm); Nützel, 203; Unvala, 546. East India House; Mordtmann, "Ṭabaristān," p. 174, 878; Unvala, 547. Fitzwilliam (2.08 g, 2.3 cm; as 36.1). Allotte de la Fuÿe; Unvala, 545. Masson; Thomas, "Pehlevi Coins," p. 347; Unvala, 548. De Morgan (1.95 g, 2.4 cm); Guillou, 113 (as 36.2; erroneously read as PYE 109). Qamišliyya hoard (2.02 g, 1.84 g); Gyselen and Kalus, 357–58. Zubov, now Moscow; Unvala, 549–59.

PYE 100/134 H., st' 

- | | | | |
|------|------|------|--|
| 37.1 | 1.62 | 2.15 | Rev. single pellets below star l. and crescent r. of flames. BM (Count de Salis, 1862); Unvala, 562. Plate 15. |
| 37.2 | 1.93 | 2.4 | As 37.1. Malek. |
| 37.3 | 1.91 | 2.45 | Rev. star l. and crescent r. of flames, no pellets below. Malek. |
| 37.4 | 2.04 | 2.35 | As 37.3. ANS 1944.100.51198 (E. T. Newell); Unvala, 588. Plate 15. |
| 37.5 | 2.04 | 2.4 | As 37.3. ANS 0000.999.32342; Unvala, 563 (?). |

Baghdad (1.964 g, 2.4 cm; 1.956 g, 2.5 cm); Naqshabandi, 85 (pl. 6; as 37.3), 85A. Copenhagen (1.87 g); Ostrup, 95; Unvala, 589. Allotte de la Fuÿe; Unvala, 560. Hermitage; Unvala, 591. Ismail Pasha; Mordtmann, "Ṭabaristān," p. 174, 879; Unvala, 561. Muraccoile; Unvala, 592. Stockholm; Unvala 590. Zambaur (Vienna); Unvala "Supplementary," p. 41, 19–20. Zubov, now Moscow; Unvala, 564–87.

PYE 101/135 H., 'ywkst' 

- | | | | |
|------|------|-----|---|
| 38.1 | 1.88 | 2.4 | Obv. crescent below star l. of crown. Holed. BM (P. Ziegler, 1935); Unvala, 627. Plate 15. |
| 38.2 | 1.73 | 2.3 | Obv. no star or crescent l. of crown. BM (Anon, 1953). |
| 38.3 | 1.92 | 2.3 | Obv. star but no crescent l. of crown. Rev. crescent l. and crescent (or star) r. of flames. Malek. |
| 38.4 | 1.71 | 2.3 | Obv. as 38.3. Rev. as 38.1. Malek. |

38.5	2.03	2.3	As 38.4. ANS 1944.100.71848 (ex E. T. Newell); Unvala, 596.
38.6	1.92	2.4	As 38.4. ANS 1956.137.5. Plate 15.
38.7	1.94	2.5	As 38.4. ANS 1991.3.294.
38.8	2.01	2.4	Obv. as 38.3. Rev. star with pellet below l. and crescent r. of flames. Malek. Plate 15.
38.9	1.58	2.15	Obv. star l. of crown reduced to pellet. Rev. no symbol l. and crescent r. of flames. J. de Morgan; Guillou, 110 (erroneously read as PYE 107).

Baghdad (1.759 g, 2.4 cm); Naqshabandi, 93, pl. 6 (as 38.1; erroneously read as PYE 121). Fitzwilliam CM. 1973–8 (1.94 g, 2.4 cm; as 38.4). Allotte de la Fuÿe; Unvala, 593–95. Hermitage; Unvala, 628. De Morgan (1.85 g, 2.35 cm); Guillou, 112 (as 38.4; erroneously read as PYE 108). Prokesch von Osten; Mordtmann, “Pehlevi-Legenden,” p. 486, 78; Unvala, 597. Qamišliyya hoard (1.84 g); Gyselen and Kalus, 359. Qatar (2 g, 2.4 cm); al-Ush, 146. Museum of St. Petersburg Academy; Dorn, “Ispehbede,” p. 249, bronze issue (not illustrated). Subhi Bey; Mordtmann, “Pehlevi-Legenden,” p. 475, 178; Unvala, 598. Unv.; Unvala, “Supplementary,” p. 43, 1. Ziegler; Unvala, 599 (possibly same coin as 38.1). Zubov, now Moscow; Unvala, 601–25. Unvala, 600, refers to a coin in the ANS, but there is no trace of it in the collection.

PYE 102/136 H., dwst'

39.1	1.95	2.4	BM (Seaby, 1957).
39.2	1.86	2.25	Malek.
39.3	1.89	2.25	ANS 1917.216.62; Unvala, 635.
39.4	2.02	2.3	ANS 1944.100.51200 (E.T. Newell); Unvala, 661. Plate 15.
39.5	2.01	2.3	ANS 0000.999.32343.



Ashmolean (1.82 g, 2.4 cm; as 39.1). Baghdad (2.004 g, 2.5 cm; 2.002 g, 2.4 cm; 1.962 g, 2.4 cm); Naqshabandi, 86 (pl. 6; as 39.1), 86A, 86B. Berlin (2.03 g, 2.4 cm); Nützel, 204; Unvala, 630; Unvala, “Supplementary,” p. 44, 4 (further example). Copenhagen (1.81 g); Ostrup, 96; Olshausen, p. 89; Mordtmann, “Ṭabaristān,” p. 174, 880; Unvala, 631, 657. East India House; Mordtmann “Ṭabaristān,” p. 174, 880; Unvala, 631. Fitzwilliam (2.05 g, 2.4 cm; as 39.1). Allotte de la Fuÿe; Unvala, 629. Hermitage; Unvala, 658–59. Masson; Thomas, “Pehlevi Coins,”

p. 347; Unvala, 632. Paris (1.61 g, 2.3 cm; holed twice); Lavoix, 150; Guillou 102; Unvala, 634. Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," p. 486, 79; Unvala, 633. Museum of St. Petersburg Academy; Dorn, "Ispehbede," p. 259. L'Institut des Langues Orientales, St. Petersburg; Markoff, p. 123. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 21–24. Ziegler; Unvala, 660. Zubov, now Moscow; Unvala, 636–56.

PYE 103/137 H., *syst'*  40.1–.3; *syst'*  40.4–.6

40.1	1.81	2.2	Rev. crescent l. and star r. of flames. BM (C. Davies Sherborn, 1936). Plate 15.
40.2	2.05	2.35	As 40.1. Malek.
40.3	1.93	2.45	As 40.1. Malek.
40.4	2.00	2.35	Rev. star l. and crescent r. of flames. Malek.
40.5	2.07	2.3	As 40.4. ANS 1944.100.51203. Plate 15.
40.6	2.01	2.4	As 40.4. ANS 1957.84.5.

Baghdad (1.743 g, 2.4 cm); Naqshabandi, 87, pl. 6. Davis; Unvala, 664. Hermitage; Unvala, 683. Jena (2 g); Stickel, 56 (erroneously read as PYE 61); Unvala, 840 (erroneously read as PYE 110); Walker, *Arab-Sassanian*, p. 203 (erroneously listed as PYE 110). E. T. Newell; Unvala, 684. Qamišliyya hoard (1.95 g, 1.82 g); Gyselen and Kalus, 360–61. Soret; Mordtmann, "Erklärung," p. 56. 309; Unvala, 662. Sprewitz; Soret, p. 13 (erroneously read as PYE 110). L'Institut des Langues Orientales, St. Petersburg; Markoff, p. 123. Subhi Bey; Mordtmann "Pehlevi-Legenden," p. 475, 179; Unvala, 663. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 25–26. Zubov, now Moscow; Unvala, 666–82. Unvala, 665, refers to a coin in the ANS, but there is no trace of it in the collection. Date easily confused with PYE 110; Unvala, 838 and 842 may well be dated PYE 103.

PYE 104/138 H., *ch'lst'*  41.1–.5; *ch'lst'*  41.6–.8

41.1	1.99	2.35	Obv. breast ornament double struck. Malek.
41.2	2.02	2.4	Malek.
41.3	1.5	2.25	BM (C. Davies Sherborn).
41.4	1.85	2.4	ANS 1974.26.89; Unvala, 698.
41.5	1.93	2.35	ANS 1972.169.188. Plate 15.

- 41.6 Rev. crescent l. and star r. of flames. Unv.; Unvala, 749.
- 41.7 1.92 2.3 ANS 1991.3.292.
- 41.8 1.77 2.4 ANS 1991.3.293.
- Berlin (1.94 g, 2.5 cm); Nützel, 205; Unvala, 690. Cayol; Mordtmann, *Ṭabaristān*, p. 174, 881; Unvala, 692. Copenhagen (1.87 g); Ostrup, 97; Unvala, 750. Davis; Unvala, 696. Allotte de la Fuÿe; Unvala, 685–89. Ġazīra hoard; Gyselen and Nègre, p. 193. Hermitage; Unvala, 751. Jena (1.67 g); Stickel, 58; Unvala, 694. De Morgan (1.9 g, 2.4 cm; 2 g, 2.4 cm; as 41.1); Guillou, 103–4. Mordtmann; Mordtmann, *Ṭabari-stān*, p. 174, 881; Unvala, 691. Paris (1.8 g holed, 2.3 cm; as 41.1); Guillou, 105; Lavoix, 151; Unvala, 695. Prokesch von Osten; Mordtmann, *“Pehlevi-Legenden,”* p. 486, 80; Unvala, 693. Qatar (2.05 g, 2.22 cm); al-Ush, 147. Unv.; Unvala, 748–49. Zambaur (Vienna); Unvala, *“Supplementary,”* p. 41, 27–29. Ziegler; Unvala, 697. Zubov, now Moscow; Unvala, 699–747.

PYE 105/139 H., *pnčst'* 

- 42.1 2.03 2.4 Malek.
- 42.2 2.00 2.3 ANS 1944.100.51202 (E. T. Newell); Unvala, 755. Plate 16.
- Alishan; Mordtmann, *Ṭabaristān*, p. 174, 882; Unvala, 752. Bagdad (1.932 g, 2.5 cm; 1.969 g, 2.4 cm; 1.939 g, 2.4 cm); Naqshabandi, 88 (pl. 6; as 42.1), 88A, 88B. Berlin; Unvala, *“Supplementary,”* p. 44, 5. Copenhagen (1.61 g, 1.89 g); Ostrup, 71, 98; Unvala, 778. Godard; Unvala, *“Supplementary,”* p. 44, 2. Hermitage; Unvala, 781. De Morgan (1.82 g, 2.45 cm); Guillou, 106. Paris (1.83 g, 2.4 cm); Guillou, 107; Unvala, 754. Prokesch van Osten; Mordtmann, *“Pehlevi-Legenden,”* p. 486, 81; Unvala, 753. Museum of St. Petersburg Academy; Dorn, *“Ispehbede,”* p. 259. Qamišliyya hoard (1.79 g); Gyselen and Kalus, 362. Qatar (1.95 g, 2.48 cm); al-Ush, 148. Stockholm; Unvala, 779–80. Zubov, now Moscow; Unvala, 757–77. Unvala, 756, refers to a coin in the ANS, but there is no trace of the coin in the collection.

PYE 106/140 H., *ššst'*  43.1, 43.5; *ššst'*  43.2–.3; *ššst'*  43.4

- 43.1 1.84 2.45 BM (H. L. Rabino, 1909); Unvala, 784. Plate 16.

- | | | | |
|------|------|-----|---|
| 43.2 | 1.93 | 2.4 | Holed. BM (Parkes Weber, 1906); Unvala, 785. |
| 43.3 | 2.01 | 2.4 | As 43.2. BM (Dr. Göbl, 1962). Plate 16. |
| 43.4 | 2.00 | 2.4 | Rev. single pellets below star l. and crescent r. of flames. Malek. Plate 16. |
| 43.5 | 2.04 | 2.4 | Rev. as 43.1, but crescent l. and star r. of flames. Malek. Plate 16. |

Alishan; Mordtmann, "Pehlevi-Legenden," p. 475, 180; Unvala, 783. Berlin; Unvala, "Supplementary," p. 44, 6. Fitzwilliam CM. 1973-9 (1.67 g, 2.35 cm; as 43.1). Allotte de la Fuÿe; Unvala, 782. Hermitage; Unvala, 799. Qatar (1.53 g, 2.2 cm); al-Ush, 149. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 30. Zubov, now Moscow; Unvala, 787-98. Unvala, 786 refers to a coin in the ANS, but there is no trace of the coin in the collection.

PYE 107/141 H., *hptst'* 

- | | | | |
|------|------|-----|--|
| 44.1 | 2.04 | 2.4 | ANS 1944.100.51204 (E. T. Newell); Unvala, 803. |
| 44.2 | 1.95 | 2.4 | ANS 1917.215.137; Unvala, 802. |
| 44.3 | 2.04 | 2.4 | Rev. crescent l. and star r. of flames. Paris, Plate 16. |

Hermitage; Unvala, 814. Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," p. 486, 82; Unvala, 801. Museum of St. Petersburg Academy; Dorn, "Ispehbede," p. 259. Zubov, now Moscow; Unvala, 804-13. See 22A above for anonymous issues probably dated PYE 107.

PYE 108/142 H., *hštst'*  and 

45. Allotte de la Fuÿe; Unvala [42], no. 815. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 475, 181. Qamišliyya hoard (1.99 g); Gyselen and Kalus, 363. See 22B-C above for anonymous bronze issues probably dated PYE 108.

PYE 109/143 H., *nwst'* 

- | | | | |
|------|------|-----|--------|
| 46.1 | 2.07 | 2.4 | Malek. |
|------|------|-----|--------|

46.2 1.91 2.4 ANS 1944.100.51205 (E. T. Newell); Unvala, 818. Plate 16.

Hermitage; Unvala, 837. Qatar (2 g, 2.4 cm); al-Ush, 150. Zubov, now Moscow; Unvala, 819–36. Unvala, 817, refers to a coin in the ANS, but there is no trace of it in the collection.

COINS OF THE EARLY 'ABBĀSĪD GOVERNORS

Khurshīd Posthumous Issues, PYE 110–15

Obv: As Khurshīd issues, but broader bust.

Rev: As Khurshīd issues.

PYE 110/144 H., *d'st'*  47.1; *d'st'*  47.2–.3

47.1 1.96 2.4 Obv. no crescent r. of crown; star l. and r. of crown almost reduced to pellets. Rev. crescent l. and star r. of flames. BM (Lawrence, ex Herzfeld, 1935); Walker, *Arab-Sassanian*, p. 131, 255, pl. 23, 1; Unvala, 846; Gaube, pl. 10, 125. Plate 16.

47.2 1.89 2.3 Obv. no crescent r. of crown; full stars l. and r. Rev. star l. and r. of flames. Malek. Plate 16.

47.3 1.92 2.4 As 47.2. ANS 1971.316.51. Baghdad (1.958 g, 2.5 cm; 1.889 g, 2.5 cm); Naqshabandi, 89 (pl. 6; as 47.2), 89A. Muracciole; Unvala, 848. Statens Historiska Museum, Norway (1.87 g, 2.3–2.35 cm); Linder (as 47.2). Paris (1.86 g; as 47.2). Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," p. 486, 76 (erroneously read as PYE 60); Unvala, 839. Qatar (1.75 g, 2.46 cm); al-Ush, 151. Stockholm; Unvala, 847. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 474, 169 (erroneously read as PYE 61); Unvala, 841. Zubov, now Moscow; Unvala, 845. Date easily confused with PYE 103; Unvala, 838, 840, 842, 844 probably all dated PYE 103 and not PYE 110. Unvala, 843, refers to a second example in BM, but there is no trace of it in the collection. For change to broad bust from this year, see Malek, pp. 39–40.

PYE 111/145 H., y'zd'st' 𐭪𐭣𐭥𐭥𐭥𐭥

- 48.1 1.93 2.4 Obv. narrow bust; star and crescent r. of crown. Rev star l. and r. of flames. BM (Lady Pears, 1936); Walker, *Arab-Sassanian*, p. 131, 256, pl. 23, 2; Unvala, 851–54. Plate 16.
- 48.2 1.79 2.4 Obv. broad bust; star l. of crown reduced to pellet, no crescent r. of crown. BM (L. A. Lawrence, 1935); Walker, *Arab-Sassanian*, p. 131, 257, pl. 23, 3; Unvala, 851–54.
- 48.3 2.03 2.45 As 48.2. Malek. Plate 16.
- 48.4 1.76 2.4 As 48.2. ANS 1970.184.1.
- 48.5 1.92 2.4 As 48.2. ANS 1971.316.50.
- 48.6 1.62 2.4 As 48.2. Stockholm: c.f. Unvala, 858, 860. Baghdad (1.883 g, 2.4 cm); Naqshabandi, 90, pl. 6 (as 48.2) erroneously read as PYE 112). Allotte de la Fuÿe; Unvala, 849. Stockholm; Unvala, 858. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 475, 182; Unvala, 850. Unv.; Unvala, "Supplementary," p. 43, 2. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 31–32. Zubov, now Moscow; Unvala, 855–57. Unvala, 851–54 refers to four coins in the BM, but only two exist in the collection. Date may be confused with PYE 113.

PYE 112/146 H., dwy'zst(?) 𐭪𐭣𐭥𐭥𐭥𐭥𐭥

- 49 2.4 Unv.; Unvala, 859, pl. 1; Walker, *Arab-Sassanian*, p. 132, U1.

Most rare issue. Coins exist in name of Rawḥ ibn Ḥatim for 146 H. (see 53 below).

PYE 113/147 H.

- 50 No confirmed reading of this date.
Tornberg, *Symbolae*, 65 (= Unvala, 860) refers to a coin of this date in Stockholm; c.f. Walker, *Arab-Sassanian*, p. 132, To.3. In fact this coin is dated PYE 111 as shown by photograph supplied by Dr. Hovén (= 48.6). Sotheby, 16 July 1906 (Johnston), 132, is listed as PYE 113, but the reading is doubtful (not illustrated). Coins exist in name of Rawḥ ibn Ḥatim for 147 H. (see 54 below).




PYE 114/148 H., *čh'ld'st'* 

- 51.1 1.52 2.3 Obv. no crescent r. of crown. Rev. star l. and r. of flames. BM; Unvala, 865; Walker, *Arab-Sassanian*, p. 132, 258, pl. 23, 5.
- 51.2 1.77 2.3 As 51.1. Malek. Plate 16.
- 51.3 1.79 2.3 As 51.1. ANS 1957.84.6.
- 51.4 1.91 2.4 As 51.1. ANS 1971.316.52.
- 51.5 1.48 2.2 ANS 1991.3.513.
- 51.6 1.94 2.4 Obv. no breast ornament. Paris. Plate 16.
- 51.1 in BM was erroneously read as PYE 64 by Thomas, "Pehlevi Coins," p. 347, corrected by Olshausen, p. 90; Mordtmann, "Tabaristān," p. 174, 883; Thomas, "Decipherments," p. 455; Unvala, 852–63. Baghdad (1.886 g, 2.5 cm; 1.811 g, 2.4 cm); 1.74 g, 2.3 cm); Naqshabandi, 91 (pl. 6), 91A, 91B. Cairo (1.97 g, 2.4 cm); Nicol, 30. Godard; Unvala, "Supplementary," p. 44, 3. Hermitage; Unvala, 871. Jena (1.85 g); Stickel, 59. Muracciole; Unvala, 872. Prokesch von Osten; Mordtmann, "Pehlevi-Legenden," p. 486, 83; Unvala, 861. Stockholm; Unvala, 870. Zubov, now Moscow; Unvala, 866–69.

PYE 115/149 H., *p'nčd'st'* 

- 52.1 1.91 2.5 Obv. no crescent r. of crown. Rev. star l. and r. of flames. Large flan. Malek.
- 52.2 2.09 2.5 As 52.1. ANS 1965.22.1.
- 52.3 1.83 2.4 As 52.1. ANS 1971.316.53. Plate 16.
- Baghdad (1.96 g, 2.6 cm); Naqshabandi, 92, pl. 6 (as 52.1). Hermitage; Unvala, 873. Paris. Thorburn (1.74 g, 2.4 cm); Unvala, 874; Walker, *Arab-Sassanian*, p. 132, Th.19 (erroneously read as PYE 111); Malek pp. 39–40.

Rawḥ ibn Hātim 146–47 H.

Obv.: As Khurshīd's issues, no fillet or rosette above shoulders, star r. of crown almost a pellet. In Kufic in r. field *al-Mahdī Muḥammad*  and in l. field *b. amīr al-mu'minēn* . In Pahlavi 'pd  in second quarter near rim.

Rev.: As Khurshīd issues, star (almost pellet) l. and r. of flames. In Kufic in r. field *bi-Ṭabaristān*  below *sanall*  and

Hijra date, in l. field *mimmā amara bihi Rawḥ ibn Ḥātim*
 محامير روم بر طاب

146 H./PYE 112, *sitt wa arb'in wa miy* سته وارسترد صد

53. 1.63 2.25 BM (Baldwin, 1982). Plate 16.
 53A Also of 146 H. is a dirham issue of conventional Islamic type without governor's name. American University of Beirut; H. Porter, "Unpublished Coins of the Califate," *NC* 1921, p. 318; Walker, *Arab-Sassanian*, p. LXXV, n. 2. Spink 27 (Zurich), 1 June 1988, 367 (2.94 g). Historical Museum Bern (2.84 g; ex Heinrich Moser-Charlottenfels).

147 H./PYE 113, *sab'a wa arb'in wa miya* سه د ارسترد صد

- 54.1 1.88 2.4 Paris; Curiel, p. 151, 1..
 54.2 1.9 2.3 As 54.1. Malek. Plate 17.
 Konsul Meyer (1.88 g, 2.4 cm) Münz Zentrum 31, 27 Apr. 1978, 350.
 54A-B. Also of 147 H. and 148 H. are dirhām issues of conventional Islamic type in name of Rawḥ ibn Ḥātim. BM: 147 H. (2.9 g, 2.6 cm) and 148 H. (2.93 g, 2.6 cm), both illustrated here, Plate 17. Curiel, p. 153, n. 2; Walker, *Arab-Sassanian* p. LXXV, n. 2. Malek; 147 H. (2.91 g, 2.6 cm). Münz Zentrum 43, 27 Apr. 1981, 881; 147 H.

Khālīd ibn Barmak, PYE 115-20

Obv.: As Khurshīd's issues, broader bust, no crescent above r. shoulder,
 Ḥ'lyt سبط

Rev.: As Khurshīd's issues, star l. and r. of flames.

PYE 115/149 H., *p'nēd'st'* پنه د ست



- 55 2.04 2.4 ANS 1965.22.2. Plate 17.
 Baghdad (2 g, 2.4 cm); Naqshabandi, 95, pl. 6.

PYE 116/150 H., *ššwyd'st* (?) شش وید ست

- 56.1 2.02 2.3 Malek. Plate 17.
 56.2 1.86 2.3 No breast ornament, no crescent r. of crown.
 Malek. Plate 17.
 Baghdad (2.03 g, 2.4 cm; 1.99 g, 2.4 cm; 1.945 g, 2.35 cm; 1.995 g,

2.5 cm); Naqshabandi, 96 (as 56.1), 96A, 96B, 96C. Prince Gagarine, *Lettre a M. F. Soret* (1862), p. 8, 1; Unvala, 877. Istanbul Museum (2 examples); Walker, *Arab-Sassanian*, p. 133, Zub.2. Stockholm; Unvala, 876. Zubov; Unvala, 875.

56A. Also of 150 H. is a bronze fals issue of conventional Islamic type in the name of Khālid ibn Muḥammad: ANS 1971.224.2 (5.08 g); Miles, 382. Plate 17.

PYE 117/151 H., *hptd'st*  57.1-.2, 57.6; *hptd'st'*  57.3-.5

57.1 1.59 2 Obv. no crescent r. of crown. Break in margin at 3h. BM (Oldroyd, 1946); Unvala, 880; Walker, *Arab-Sassanian*, p. 133, Z.4, pl. 23, 6; Gaube, pl. 11, 126.


57.2 1.87 2.25 As 57.1. ANS 1971.316.54. Plate 17.

57.3 1.89 2.3 No crescent r. of crown. Malek.

57.4 1.99 2.3 As 57.3. ANS 1957.84.7. Plate 17.

57.5 1.9 2.3 As 57.3, no breast ornament. Malek. Plate 17.

57.6 2 2.3 As 57.1, crescent r. of crown. Yapi; Tözen, 4. Baghdad (1.992 g, 2.4 cm; 1.813 g, 2.3 cm; 1.934 g, 2.3 cm; 1.99 g, 2.3 cm; 2.017 g, 2.3 cm); Naqshabandi, 97 (pl. 6; as 57.1), 97A-D. Berlin (1.8 g, 2.3 cm); Nützel, 206; Unvala, 879. Hermitage; Unvala, 884. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 475, 183; Unvala, 878. Zubov, now Moscow; Unvala, 882-83.

PYE 118/152 H., *hštd'st* 

58.1 1.88 2.3 Narrower bust. BM (Taylor, 1865); Unvala, 887; Walker, *Arab-Sassanian*, p. 133, 259, pl. 23, 7; Gaube, pl. 11, 127.


58.2 1.95 2.3 As 58.1. Malek.

58.3 1.84 2.35 As 58.1. ANS 1971.316.55. Plate 17.

58.4 1.83 2.3 Narrower bust, no crescent r. of crown. Malek. Plate 17.

Baghdad (1.933 g, 2.4 cm; 1.997 g, 2.4 cm; 1.958 g, 2.4 cm); Naqshabandi, 98 (pl. 6; as 58.1), 98A, 98B; Berlin (1.78 g, 2.35 cm); Nützel, 207; Unvala, 886. Hermitage; Unvala, 890. Muracciole; Unvala, 891. Asia-

tic Institute, St. Petersburg; Dorn, "Ispehbede," p. 261. L'Institut des Langues Orientales, St. Petersburg; Markoff, p. 123. Subhi Bey; Mordtmann, "Pehlevi-Legenden," p. 475, 184; Unvala, 885. Zubov, now Moscow; Unvala, 888–89.

PYE 119/153 H., *nw'ēd'st'*  59.1, 59.3–.4; *nw'ēd'st'*  59.2


59.1 2.03 2.35 Narrower bust, no crescent r. of crown. BM (Lt. Col. Claude Stewart); Unvala, 894; Walker, *Arab-Sassanian*, p. 134, 260, pl. 23, 8; Gaube, pl. 11, 128. Plate 17.

59.2 1.92 2.3 Malek. Plate 17.

59.3 1.96 2.3 As 59.1, crescent r. of crown. Malek.

59.4 1.93 2.4 As 59.3. ANS 1971.316.56. Plate 17.

Baghdad (1.83 g, 2.4 cm; 1.94 g, 2.45 cm); Naqshabandi, 99 (pl. 6; as 59.2), 99A. Copenhagen (1.9 g); Ostrup, 72. Hermitage; Unvala, 897. Mordtmann; Mordtmann, "Ṭabaristān," p. 174, 884; Unvala, 892. Muracciole; Unvala, 898. Asiatic Museum, St. Petersburg; Dorn, "Pehlewy-Münzen," p. 609. Zambaur (Vienna); Unvala, "Supplementary," p. 41, 33. Zubov, now Moscow; Unvala, 895–96.

PYE 120/154 H., *wystst'* 

60 1.96 2.4 Narrower bust, no crescent r. of crown. ANS 1976.112.1. Plate 17.

Zubov, now Moscow; Unvala, 899; Walker, *Arab-Sassanian*, p. 134, Zub.2. Although PYE 120 is rare for Khālīd ibn Barmak, numerous examples are known of this year for next governor, Umar ibn al-'Alā.

Table 1: Comparative Table of Eras

<i>PYE</i>	<i>A.D.</i>	<i>H.</i>	<i>A.D.</i>
60	May 711	93	October 711
61	712	94	" 712
62	713	95	September 713
63	714	96	" 714
64	715	97	" 715
65	716	98	August 716
66	717	99	" 717

67	718	100	"	718
68	719	101	July	719
69	720	102	"	720
70	721	103	"	721
71	722	104	June	722
72	723	105	"	723
73	724	106	May	724
74	725	107	"	725
75	726	108	"	726
76	727	109	April	727
77	728	110	"	728
78	729	111	"	729
79	730	112	March	730
80	731	113	"	731
81	732	114	"	732
82	733	115	February	733
83	734	116	"	734
84	735	117	January	735
85	736	118	"	736
86	May 737	119	January	737
		120	December	737
87	738	121	"	738
88	739	122	"	739
89	740	123	November	740
90	741	124	"	741
91	742	125	"	742
92	743	126	October	743
93	744	127	"	744
94	745	128	"	745
95	746	129	September	746
96	747	130	"	747
97	748	131	August	748
98	749	132	"	749
99	750	133	"	750
100	751	134	July	751
101	752	135	"	752
102	753	136	"	753

103	754	137	June	754
104	755	138	"	755
105	756	139	"	756
106	757	140	May	757
107	758	141	"	758
108	759	142	"	759
109	760	143	April	760
110	761	144	"	761
111	762	145	"	762
112	763	146	March	763
113	May 764	147	March	764
114	765	148	February	765
115	766	149	"	766
116	767	150	"	767
117	768	151	January	768
118	769	152	"	769
119	770	153	"	770
		154	December	770
120	771	155	"	771

PYE is based on the solar year of 365 days; PYE1 commenced on 11 June 652 being the commencement of the first solar year after the death of the last Sasanian king Yazdgard III (A.D. 632–51). The new year receded by one day in the Christian year whenever the latter was a leap-year (once every four years). The Hijra era dates from the flight of Muḥammad from Mecca to Medina on 15 June 622. Hijra is based on the lunar year composed of 12 months of 28 days each plus one intercalated day 11 times in 30 years (the lunar year is approximately 11 days shorter than the solar year).

Table 2: Chronology of the Ispahbads

<i>A.D.</i>	<i>H.</i>	<i>Events</i>
642	21	Ispahbad Farrukhān Gīlānshāh sent contingents to assist Yazdgard III who was defeated at the battle of Nihavand.
643	22	Campaign of Suwayd ibn Amir ibn Muḥkarrin against Ṭabaristān.

- 650 30 Expedition led by Sa'īd ibn al 'Aṣ met with resistance by the Ispahbad Farrukhān Gīlānshāh.
- 651 31 Death of the last Sasanian king Yazdgard III.
- 662 42 Masqalah ibn Hubayrah al-Shaybāni's campaign met with defeat.
- 680–83 61–4 Defeat of Kūfan general Muḥammad ibn al-Ash'ath.
- 681 62 Gīl Gāwbāra possibly became Ispahbad approximately around this time, although the local chroniclers put the commencement of his rule during the reign of Yazdgard III (died A.D. 651; 31 H.) or PYE 35 (A.D. 666, 46 H.).
- 696 77 Ishāq ibn Muḥammad ibn al-Ash'ath briefly entered Ṭabaristān in charge of troops. Dābūya possibly succeeded his father as Ispahbad around this time, although the local chroniclers put his accession to PYE 50 (A.D. 681).
- 698 79 Revolt of the Khārijite Qaṭarī put down either by Sūfyān ibn al-Abrad alone (according to al-Ṭabarī) or with the help of the Ispahbad Farrukhān (according to ibn Isfandiyār).
- 702 83 The Ispahbad surrendered 'Umar ibn Abī'l-Ṣalt, who had sought refuge in Ṭabaristān, in order to avoid the hostility of al-Ḥajjāj ibn Yūsuf (according to al-Ṭabarī and ibn al-Athīr).
- 711 93 Farrukhān became Ispahbad around this time. According to the local chroniclers his reign commenced earlier and he ruled for 17 years. Farrukhān's first coinage commenced, PYE 60.
- 715 97 No coins are known for this date, PYE 64.
- 716 98 Yazīd ibn al-Muḥallab's unsuccessful campaign against Ṭabaristān.
- 720 102 Umayyad dirham issue of conventional Islamic type, 102 H.
- 721–5 103–7 Coins of Farrukhān in this period are very rare, PYE 70–74.
- 726 108 Farrukhān's second coinage commenced and continued until A.D. 728, 110 H.; PYE 77.

- 728 110 Death of Farrukhān or perhaps A.D. 730; 112 H.; PYE 79. Commencement of Dād-būrzmihr's rule, who ruled for 12 years according to the local chroniclers.
- 729 111 No coins are known for this date, PYE 78.
- 730 112 Commencement of coins in Dād-būrzmihr's name. Possibly coins were also issued in the name of Farrukhān in this year, PYE 79, according to Unvala. Dād-būrzmihr's rule may therefore have commenced in this year.
- 731-37 113-19 No coins are known in this period with the name of any Ispahbad, PYE 80-85.
- 738-39 120-21 Coins issued in the name of Dād-būrzmihr, PYE 86-87, not so rare as PYE 79.
- 740 122 According to Unvala (unconfirmed) exceedingly rare issues in the name of Dād-būrzmihr, PYE 88.
- 741 123 Upon death of Dād-būrzmihr, his brother Farrukhān Kūchek or possibly Sārūya became regent for his son Khurshīd during his minority. The regency lasted for eight years according to the local chroniclers. Coins issued by Khurshīd from PYE 89-109.
- 748 131 Umayyad armies led by Abū Muslim entered Ray and Khurshīd agreed to pay tribute.
- 754 136 Al-Mansūr appointed Caliph.
- 755 137 Execution of Abū Muslim and revolt of Sunbādh.
- 757 140 Occupation of Āmul (ibn Isfandiyār).
- 758 141 First conquest of Ṭabaristān (al-Ṭabarī). Coins in name of Khurshīd for this year are rare, PYE 107. Abū al-Khasīb appointed governor.
- 759 142 Uprising by Khurshīd and slaughter of Muslims in Ṭabaristān (al-Ṭabarī). Coins in name of Khurshīd very rare for this year, PYE 108. Khurshīd defeated (al-Ṭabarī). Khāzim ibn Khuzayma appointed governor.
- 760 143 Perhaps Khurshīd defeated in this year and death of Khurshīd (al-Ṭabarī). Coins in name of Khurshīd very rare for this year, PYE 109. The numismatic

- evidence indicates Khurshīd died in this or the next year. Abū al-Abbās Faḍl appointed governor.
- 761 144 Posthumous issues, PYE 110–15, in name of Khurshīd until A.D. 766, 149 H.; PYE 115. Rawḥ ibn Ḥātim appointed governor in this or the next year.
- 763 146 Coins in name of Rawḥ ibn Ḥātim of Ispahbad type, 146 H.
- 764 147 Coins in name of Rawḥ ibn Ḥātim of both conventional Islamic type and Ispahbad type, 147 H.
- 765 148 Coins in name of Rawḥ ibn Ḥātim of conventional Islamic type, 148 H.
- 766 149 Coins in name of Khālīd ibn Barmak, PYE 115, who was appointed governor.
- 771 155 Last coins in name of Khālīd ibn Barmak, PYE 120, coins mainly issued in name of ‘Umar ibn al’Alā for this year, who was appointed governor.

GERALD M. BROWNE

1. *Samudragupta*, ca. 330–70, 2 cm, 7.6 g. Plate 18.

[illegible]
$$- - | - \quad v \quad v | - - || - \quad - \quad | \quad v \quad v - | v | \quad - \quad v \quad v | -$$

Rev.: Goddess (Lakshmī), nimbate, standing with head turned l.,
flower in r. hand, cornucopia in l.; to l. ལྷ་; to r. སྐལ་འཕྲོ་མ་
Sarvarājocchettā

¹ A. S. Altekar, *The Coinage of the Gupta Empire* (Varanasi, 1957).

In the obverse legend, instead of *dyām̐*, Allan² transcribed *divam̐* and wrote: "the metre is . . . Upagīti, *though somewhat halting* [italics mine]. . . . The *Ṣ* of *divam̐*, which metre and sense require, is visible on Pl. II, 9 and 11, but no specimen gives the *Ḍ*." Subsequent works repeat Allan's transcription.³ The present specimen clearly has *dyām̐*, an alternative form of *divam̐* attested both in Vedic and in the later language, see, for example, *Rāmāyaṇa* 2.85.24 (Baroda ed., vol. 2 [1962], p. 489) *dyām̐ ca bhūmim̐ ca* "both heaven and earth." The *y* ligatured to *d* is slightly distorted because of compression at the end of the first half of the legend on the coin, but it is in principle no different from that in *ty* (*ṭ*) in the preceding word. The writing is even more clearly written in *Bayana Hoard* (above, n. 3), 194, pl. 6, 11, *ṭ* and *Bharat Kala Bhavan* (above, n. 3), 8674, pl. 1, 15, *ṭ*, though the first was transcribed in the edition as *da* . . . and the second as [*dava*]. With *dyām̐* instead of *divam̐*, the line now has the caesura in the correct place and is no longer "somewhat halting."

2. Kumāragupta I, 414–55, 1.9 cm, 8.24 g. Plate 18.

Obv.: King, nimbate, standing l., stooping slightly downward, r. hand extended toward peacock, l. resting on hip. Starting to r. of the king's head:

[E] 𐌸𐌹𐌺𐌰 𐌲𐌺𐌰 𐌸𐌹𐌺𐌰 𐌸𐌹𐌺𐌰 𐌸𐌹𐌺𐌰 [𐌸𐌹𐌺𐌰 𐌸𐌹𐌺𐌰 𐌸𐌹𐌺𐌰 𐌸𐌹𐌺𐌰]

[ja] yati svaguṇair gunarāśir Vṛtrani[hantṛ-Mahendrakumārah]

$$v \quad v - \mid \quad v \quad v \quad - \mid \quad v \quad v \quad - \mid - \parallel \quad - \quad v \quad v \mid - \quad v \quad v \mid - \quad v \quad v \mid - -$$

“Mahendrakumāra the destroyer of Vṛtra, having an abundance of virtues, conquers through his virtues.”

Rev.: Kārttikeya, nimbate, riding peacock perched on raised platform; to r.[𑀧]𑀭𑀢𑀺𑀓𑀲𑀸𑀓𑀾𑀢 Mahendrakumārāḥ.

Spink-Taisei 9, 20 Feb. 1991 (Skanda), 139. Altekhar, *Gupta Empire* (above, n. 1), p. 206, B.

² J. Allan, *A Catalogue of the Coins of the Gupta Dynasties and of Śaśāṅka, King of Gauda* (London, 1914), p. cx, § 132.

³ See especially A. S. Altekar, *The Gupta Gold Coins in the Bayana Hoard* (Bombay, 1954), p. 62; Altekar, *Gupta Empire*, p. 87; P. L. Gupta and S. Srivastava, *Gupta Gold Coins in Bharat Kala Bhavan* (Bharat Kala Bhavan, 1981), p. 19.

Previously published specimens revealed all of the obverse legend except *Vṛtrani*[*hanṭr*:- see Allan and Śāstri.⁴ As a restoration, *Vṛtrani*[*hanṭr*- draws support from *Vṛtrahanṭr* “killer of Vṛtra” in the *Mahabhārata* (3, 12316) and its more common synonym *Vṛtrahan*, both of which are epithets of Indra (cf. *Mahendra* in the coin legend).⁵ For *Vṛtra*: *nihan*: *Indra*, cf. *Rgveda* 1, 52, 6 *Vṛtrasya . . . nijaghantha . . . Indra*, and note also 6, 29, 6 *Indraḥ . . . vṛtrā hanati ni . .*; regarding the form cf. *arinihanṭr* “destroyer of enemies.”⁶ In terms of palaeography, *Vṛtrani*[seems fairly secure: the first *akṣara* has a circular base, as at times elsewhere.⁷ The curved stroke representing *r* is not unlike that seen in *ṛ nr*.⁸ What follows I interpret as *tra*; graphically it is very similar to *tru*,⁹ and so it is hardly surprising that Śāstri (above, n. 4) took it together with the preceding *akṣara*—which was abraded in his specimen—as *śatru*. The final *akṣara* is indistinct, but *na* (the vowel mark is gone) is at least possible as a reading. On the basis of the present specimen, I propose that *Bayana Hoard* 1702 (pl. 26, 12) also be read as *Vṛtrani*[as the plate shows fairly distinct remnants of the first two *akṣaras* and a faint trace of the third.

The following three specimens all represent the archer type characteristic of the later Gupta period. The legends are in the Upagīti meter.

⁴ J. Allan, “Indian Coins Acquired by the British Museum,” *NC* 1934, p. 235, and H. Śāstri, “Novelties in Gupta Coins,” *JASB* 1917, pp. 154–55. Śāstri proposed *śatru*[(for which see below), followed by either *niṣūdi* or *nihanṭr* (in both cases “destroyer of enemies”). In *Bayana Hoard* (above, n. 3), p. cxii, Altekar suggested *guṇā-ravindaḥ*, “a lotus of virtue,” and in n. 1 gives another alternative, *guṇaratnābdhiḥ*, “the ocean of jewels of virtue.” Of these two suggestions, neither of which can be read on any of the specimens, the former does not fit the meter and the latter ignores the caesura. Later, Altekar reported that Śāstri “had suggested that the intervening word may have been *śatrunihantā* . . . , but the specimens in the Bayana hoard show that *guṇair* was followed by *guṇa*” (*Gupta Empire* [above, n. 1], p. 204, n. 3). This misrepresents Śāstri’s position, for (1) he proposed *śatrunihanṭr*, not the unmetrical *śatrunihantā*, and (2) the word is to follow *guṇarāśiḥ*, not *svaguṇair*.

⁵ See O. Böhtlingk and R. Roth, *Sanskrit-Wörterbuch* (St. Petersburg, 1855–75), vol. 6, col. 1324.

⁶ See F. Edgerton, *Buddhist Hybrid Sanskrit Dictionary* (New Haven, 1953).

⁷ Altekar, *Gupta Empire*, p. 304.

⁸ *Bayana Hoard* (above, n. 3), pl. 22, 7.

⁹ Altekar, *Gupta Empire*, pl. 23, 39 and 40.

3. Budhagupta, ca. 475–95,¹⁰ 2.2 cm, 9.3 g. Plate 18.

Obv.: King, nimbate, standing l., bow in l. arrow in r. Garuḍa standard on l. Starting to r. of king's head:

[illegible]

Parahitakārī rājā jayati divam Vikramādityaḥ

$$v \ v \ v v | - - | - - || v \ v \ v \ v | - \quad - | v | - - | -$$



“The benefactor of others, the king Vikramāditya conquers heaven.”

Rev.: Goddess (*Lakshmī*), nimbate, seated facing on lotus; to l. ്; to r. ᱚᱛᱟᱨᱠᱷᱚᱸᱰᱤ Śrī-Vikramah.

Stephen Album transaction, 18 Dec. 1991. Altekar, *Gupla Empire* (above, n. 2), p. 278, class II.

In the obverse legend 𑀘 is below the bow. For similar isolation of the *akṣara* compare with the *Bayana Hoard*¹¹ where 𑀘 is placed between the horse's hoofs on the horseman type, class II, var. A, of Kumāragupta I. The following seven *akṣaras* survive only in the extreme lower portions, but what remains is not uncharacteristic of each and in particular, the second 𑀘 and the 𑀉 seem securely read. The final *akṣara*, 𑀘 , is almost fully intact. Contrast this with *Bharat Kala Bhavan*, p. 23: the present specimen allows us to replace *Śrī Budhaguptaḥ*, which does not metrically scan, with *Vikramādityaḥ*.¹² *Vikramādityaḥ*, alluding to the *biruda* (*Śrī*-)*Vikramaḥ* on the reverse, is also found on the coins of Chandragupta II, see Altekar,¹³ where it is coupled with *Śrī-Vikramaḥ* on the reverse.

4. *Narasinhagupta*, ca. 518–32,¹⁴ 2 cm, 9.54 g. Plate 18.

Obv.: King, nimbate, standing l., bow in l., arrow in r. Garuda standard on l. Beneath l. arm  (*Nara*); between feet  (*gre*). Starting to r. of king's head:

¹⁰ For the date, see Altekar (above, n. 1), p. 275.

¹¹ *Bayana Hoard* (above, n. 3), 1452, pl. 23, 4.

¹² This correction should also be made in *Bharat Kala Bhavan*, p. 81, class II.

¹³ Altekar, *Gupta Empire*, pp. 130 and 136. For the *biruda Vikramaḥ*, see p. 91. For its association with Budhagupta, see pp. 263 and 275–76.


¹⁴ For the date, see Altekar (above, n. 1), p. 267. The name is also spelled *Nara-simhagupta*. I follow the coins and transliterate as *-sinha-*.

ਪ੍ਰਾਨਿ ਨ ਚਿਤਿ ਏਸੁ ਖਿਡਿ ਕਰੈ [ਘਨੇ]

Parahitakārī rājā Śrī-Narasin̄ho yathā ja[yati]

v v v v | - - | - - || - v v - - | v | - v v | -

“The benefactor of others, the king, like Lord Narasinha, conquers.”



Rev.: Goddess, nimbate, seated facing on lotus; to l. ; to r.

ਵਲਾਦਿਤ੍ਯਾਹ *Vālādityah.*

Spink-Taisei 9, 20 Feb. 1991 (Skanda) 153. Altekhar, *Gupta Empire*, p. 270, class I.

In the obverse legend the surface of the A is damaged, but it appears that the engraver accidentally repeated part of the *akṣara* (A), and the **GE** is almost totally gone. For the splitting of the name *Śrī-Nara/sin* cf. *Bayana Hoard, Kumāragupto*.¹⁵ No other coin of Narasinhagupta displays even a part of this legend. For the reading see the text on the lion-trampler type of Kumāragupta I, *sākṣād iva Narasinhaḥ sin-hamahendro jayatyaniśam*, “like [*iva : yathā*] Narasinha in presence, the lion-Mahendra is eternally victorious.”¹⁶

5. *Narasinhagupta*, ca. 518–32, 2.1 cm, 9.5 g. Plate 18.

Obv.: King, nimbate, standing l., bow in l., arrow in r. Garuda standard on l. Beneath l. arm  (*Nara*); between feet  (*gre*).

Starting to r. of king's head:

[illegible]

Apratigho jayati patir vijayī Narasinhagu[pto 'yam]

$$- \quad v \quad v \quad | \quad - \quad v \quad v | v \quad v - \quad || \quad v \quad v - \quad | \quad v \quad v - \quad | \quad v \quad | - \quad - \quad | \quad -$$

"Not to be vanquished, the victorious lord, this Narsinhagupta, conquers."

Rev.: Goddess, nimbate, seated facing on lotus; to l. $\overline{\Pi}$; to r.

𑀧𑁆𑀭𑀸𑀓𑀢𑀺 Vālādityah.

Classical Numismatic Auctions Ltd. 12, 26 Sept. 1990, 1343.

Altekar, *Gupta Empire* (above, n. 1), p. 270, class I.

¹⁵ *Bayana Hoard* (above, n. 3), 1688, pl. 25, 14.

¹⁶ Allan (above, n. 2), p. cxviii, § 149 (which he inadvertently transliterated *Narasinho*).

The first three *akṣaras* of the obverse legend are badly damaged, but **𑀘𑀓** seems relatively certain and readily suggests *apratigho* (compare the reverse legend on the *apratigha* type of Kumāragupta I.¹⁷ The terminal *akṣara* in the verb *jayati* is faint and uncertain as a reading, but the preceding **𑀅𑀓** seems clear, though damaged. For **𑀕𑀺** (i.e. *ayam*) at the end, compare the text on the silver coins of Skandagupta, *vijilāvanir avanipatir jayati divaṃ Skandagupto 'yam*, "having conquered the earth, the lord of the earth, this Skandagupta, conquers heaven."¹⁸ This legend may also have been on British Museum 558. Allan read *jayati Narasinhaguptaḥ*,¹⁹ but an enlarged photograph kindly supplied by the B. M. suggests *viḥjayī Narasinhagupto ['yam]*. Similarly on *Bharat Kala Bhavan* 223, where the plate suggests *apratigho jaya[ti pa]t[ir viḥjayī] Narasinhagupto ['yam]*, but the editors read *jayati Narasimhaḥguptaḥ* [sic],²⁰ which is probably copied from Allan. In neither case, however, is the proposed reading anymore than possible. In the BM specimen *viḥjayī* seems only slightly better palaeographically than Allan's *jayati*, while in the *Bharat Kala Bhavan* coin only *gho* and *ti* in *apratigho jaya[ti pa]t[ir* appear fairly secure.²¹

¹⁷ Altekar, *Gupta Empire*. pp. 207–10.

¹⁸ Allan (above, n. 2), p. cxxii, § 158.

¹⁹ Allan (above n. 2), p. 137.

²⁰ *Bharat Kala Bhavan* (above n. 3), p. 84.

²¹ I am grateful to my colleagues H. H. Hock and L. Zgusta for reading an earlier draft of this paper and making suggestions for its improvement.

THE EARLIEST KNOWN MEDALISTS: THE SESTO BROTHERS OF VENICE

(PLATES 19-21)

ALAN M. STAHL AND LOUIS WALDMAN

The earliest struck medals of the Italian Renaissance make up an important but little-known chapter in the development of medallic art. Often left to the sidelines by art historians and numismatists, these first essays in the new medium deserve closer study as much for their technical and artistic accomplishment as for their historical significance. Two important series of struck medals were produced in the Veneto decades before Pisanello began casting medals in the late 1430s. From Padua came the unsigned medals with portraits of Francesco I and Francesco II da Carrara (Plate 19, 1 [Berlin], 2 [Bottacin]) as well as a series of foundation medals (without portraits) recovered from buildings in Padua's former territories.¹ Francesco I was lord of Padua from 1355 until his capture by Giangaleazzo Visconti in 1388. In 1390 his son, Francesco II, recovered the city in a surprise attack. Two of the Carrara portrait medals, Hill 2 and 4, bear legends commemorating the 1390 coup and so provide an approximate date for this series.² The

¹ For the Carrara portrait medals, see G. F. Hill, *A Corpus of Italian Medals of the Renaissance before Cellini*, 2 vols. (London, 1930), 1-4; for the foundation medals, 5-9 (hereafter, Hill).

² The series certainly dates before 1401, when a lead cast of one of the pieces is mentioned in an inventory of the Duke of Berry's possessions: J. von Schlosser, "Die ältesten Medaillen und die Antike," *Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses*, 15 (1897), p. 67 (hereafter, Schlosser).

Carrara medals present a fairly unified style and fabric and, as official issues, they were probably produced at the Paduan mint.³ These struck pieces were sometimes confused in earlier scholarship with a group of larger cast medals of the Carrara that are now considered restitutions.⁴ The second important series was produced in the 1390s by Marco and Lorenzo Sesto, two brothers documented as engravers of coinage at the Venetian mint. If the Sesto medals are less well known than the Carrara series, this is due partly to their extreme rarity and in part to the many questions surrounding their origins and purpose.

MARCO SESTO'S MEDAL

Hill's *Corpus* records only one example of Marco Sesto's 1393 medal, in the Museo Nazionale del Bargello, Florence (Plate 19, 3).⁵ Though a crude aftercast, the Bargello medal preserves an idea of the work's original appearance. Its obverse bears the head of an unidentified Roman emperor facing left, and on the reverse a female figure standing upon a wheel and holding the banner of St. Mark represents Venice. Writers of the eighteenth and nineteenth centuries attest to the existence of at least one struck example of Marco's medal. In fact, an original struck bronze of this medal survives in the American Numismatic Society's collection (Plate 19, 4); this piece has remained practically unknown to

³ The recent suggestion that they were made by the painter Cennino Cennini has little to support it, see *Natur und Antike in der Renaissance*, exh. cat., Liebighaus, Frankfurt-am-Main (1986), pp. 205 and 343–44. We thank Dr. Andrea Saccocci for this reference and for providing photographs of several pieces in the Museo Civico, Padua.

⁴ H. Bolzenthall, *Skizzen zur Kunstgeschichte der modernen Medaillen-Arbeit (1429–1840)* (Berlin, 1840), p. 35 (hereafter, Bolzenthall), believed that the struck Carrara pieces belonged to this series of restitutions. Hill, 1233–50, dates the cast pieces at the earliest to the middle of the sixteenth century. They may have been made for the Papafava family of Venice, descendants of the Carrara. See also Schlos-ser, p. 67.

⁵ Hill 11, diameter 33 mm., thickness 2.6–3.5 mm, 18 g. See I. B. Supino, *Il medagliere mediceo nel R. Museo Nazionale di Firenze (secoli xv–xvi)* (Florence, 1899), pp. 15–16, 1; J. G. Pollard, *Medaglie italiane del Rinascimento nel Museo Nazionale del Bargello, 1: 1400–1530* (Florence, 1984), pp. 27–28, 1. We are grateful to Dr. Renato Moscadelli of the Museo Nazionale for providing photographs of this piece.

students of the medal, though published on at least two occasions.⁶ The struck ANS medals shows clear physical indications of its method of manufacture. Part of the pearled border on both sides missed the flan (a flaw reproduced in the Bargello's cast). Faintly visible inside the reverse border of the New York medal is a ghost border caused by double striking; radial striking cracks appear on both sides. The reverse is slightly concave and its lettering shows fishtailing from hammer pressure upon the die. In the obverse field of the ANS piece is a knotlike mark of some type, and the reverse field bears the date 1393 in arabic numerals; apart from these two details, which the Bargello piece lacks, the cast and struck specimens match in all details of epigraphy. One can still distinguish the same individual drapery folds and locks of hair on both pieces. It seems certain, then, that the medal in Florence was cast from a struck example like that in New York.

The ANS's fine and well-preserved specimen reveals how accomplished an engraver Marco Sesto actually was. The height of the medal's relief is far greater than that on any medieval coinage, and the demands involved in engraving such an elaborate die were formidable. The portrait of the Roman emperor, based on an antique prototype, is handled with vigor and conveys a strong sense of three-dimensionality.

⁶ Marco's medal is 34 mm in diameter and weighs 20.34 g. The thickness of the piece varies from 2.9 to 3.8 mm, its fabric setting it well apart from the usual format of medieval coinage. The die axis is 1:00 instead of the 12:00 common on later medals or the 6:00 preferred for coins. The date at which it was acquired by the ANS is uncertain, but probably before 1911, the year A. Baldwin Brett published it in her introduction to the *Catalogue of the International Exhibition of Contemporary Medals*, rev. ed. (New York, 1911), p. xi. There the photo's caption contains no indication of its source, suggesting that it may have already been in the ANS. A brief article on the medal with an engraving of the ANS piece (exactly the same cracks are visible) appeared in "The Oldest of Modern Medals and Its Connection with the 'Carraria' Series," *AJN* 13 (1878), pp. 4–5. There it is noted that A. Balmano, a vice-president of the ANS, exhibited it at one of the Society's meetings. Our search of the accession books from 1878 through 1911 turned up no mention of the piece, and vice-president Balmano is nowhere listed in them as a donor. Since the piece was published in the *AJN* as a work of some historical interest, it is difficult to understand how it could have gotten into the Society's collection unremarked. However, the article quotes Bolzental's conclusion that Marco Sesto produced the Carrara medals in the sixteenth century (p. 35), so one possibility is that the members, believing it a restitution, decided it was an accession not worth registering.

The reverse, with its allegorical figure of Venice, is graceful and makes a pleasing composition in conjunction with the lettering. The legends on Marco's medal are written in fine gothic capitals, cut into the die by hand. The obverse legend reads: **✠MARCVS·SESTO·ME·FECIT·V·**. The inscription on the reverse is: **○PATX○TIBI○** **○VENETIX○** with the date 13 93 appearing in the field, to either side of the symbolic figure.

The knotlike mark in the obverse field at left appears to be a tiny compass.⁷ The ends of the two descending lines, depicting its pointed arms, are tapered. The image is somewhat stylized, as one might expect from a goldsmith's mark. It corresponds fairly closely to a sketch appearing in the 1432 autograph will of Marco's brother Bernardo (Plate 19, 5).⁸ Bernardo's will reveals that the compass was indeed the Sesto family's mark: one meaning of the word *sesto* in Italian is "compass."⁹ The mark must have appeared on other works produced by members of the Sesto family.¹⁰

The early history of the ANS's unique struck specimen is uncertain. It is likely that it corresponds to one or more of the struck examples referred to in the early literature. One such piece was in the collection of the eighteenth-century Roman antiquary Baron Philipp Stosch.¹¹

⁷ J. C. W. Moehsen called this mark a "Monogramma": *Beschreibung einer Berlinischen Medaillen-Sammlung, die vorzüglich aus Gedächtnis-Münzen berühmter Ärzte bestehet* (Berlin and Leipzig, 1773), p. 108; J. Morelli considered it an upper-case letter R, *La libreria già raccolta con grande studio dal signor Maffeo Pinelli veneziano*, 6 vols. (Venice, 1787), vol. 5, p. 352; G. Zanetti suggested the letters R and O intertwined (for ROMA), *Dell'origine di alcune arti principali appresso i viniziani libri due* (Venice, 1758), pp. 98–100; Schlosser (p. 70) tentatively suggested that it might be a monogram of some type; and Hill (11) described it as "a monogram or mark (tongs?)."

⁸ Archivio di Stato di Venezia (hereafter cited as ASV), Notarile Testamenti, B. 1000 (Bartolomeo Tomasi), 435. Archival research for this study was made possible by a series of grants from the Gladys K. Delmas Foundation.

⁹ A parallel to the Sesto's punning device is the tiny pair of pincers (*tenaglie*) on an anonymous medal of Lorenzo the Magnificent (Hill, 921), which led Hill to associate the medal with the Tanagli, a family of Florentine goldsmiths. The pincers on the Florentine medal are rendered with the same sort of stringy lines as the compass on Marco Sesto's medal.

¹⁰ See the discussion of the Venzone cross, p. 185 below. The use of such marks was required by the 1335 regulations of the Venetian goldsmiths, ASV, Prov. in Zecca, R. 6bis, fols. 24–24^v.

¹¹ Schlosser, p. 70.

Stosch lent his piece to a colleague at the Hague, after which it dropped out of sight; Schlosser's attempt to locate it at the Hague in the late nineteenth century was futile. Prior to sending the medal Stosch had a drawing made of it, which was published as an engraving in 1773.¹² The clarity and detail shown by the medal in the engraving leave little doubt that Stosch's specimen was struck; like the ANS piece it also bore the monogram and date. Another example is recorded in the collection of a Senator Soranzo at Venice.¹³ Zanetti, who described and illustrated it in 1758, noted emphatically that it was struck; it too had the compass and the date. Morelli described the same piece in the collection of Maffeo Pinelli some thirty years later.¹⁴ The latter may have been identical with an example that passed from the Pisani collection to the collection of a Conte Martinengo at Venice; the Martinengo piece later went to the Fortuna collection at Trieste, which was dispersed in the nineteenth century.¹⁵ Martinengo showed the piece to Cicognara, who left a description of it.¹⁶ Cicognara first doubted that a classicizing work of such early date could be authentic, but he changed his mind when he discovered that it was struck. He made that determination from the numerous radial cracks at its edge—the same pattern of cleavage visible on the ANS medal.

LORENZO SESTO'S MEDAL

The second Sesto medal (Hill 10) is undated but bears the signature of Marco's brother Lorenzo (Plate 19, 6). Hill describes it as struck but the work survives only in photographs from a crude aftercast formerly in

¹² Moehsen (above, n. 7), pp. 108–9 and 112; reproduced in Schlosser, p. 70, fig. 2.

¹³ Zanetti (above, n. 7), pp. 89–91.

¹⁴ Morelli, (above, n. 7), vol. 5, p. 352: "Rarissima, quella medesima ch'è descritta da Girolamo Zanetti nell' *Origine di alcuni arti principali apresso i viniziani*."

¹⁵ J. Friedländer, "Quali sono le prime medaglie del Medio-Evo?" *Periodico di Numismatica e Sfragistica per la Storia d'Italia* 1 (1868), p. 143 (hereafter Friedländer); Schlosser, p. 70.

¹⁶ Conte L. Cicognara, *Storia della scultura dal suo risorgimento in Italia sino al secolo di Napoleone, per servire di continuazione alle opere di Winckelmann e di Agincourt*, 3 vols. (Venice, 1813–18), vol. 2, pp. 392–93; 2nd ed., 7 vols. and plates (Prato, 1823–24), vol. 5, pp. 400–402. In both editions the work's date is misprinted as 1363.

the Staatliche Museen in Berlin and lost in World War II.¹⁷ Lorenzo's medal is smaller than Marco's (24 mm), and, though also lettered by hand, its legends are in roman capitals. The obverse bears the portrait of an individual resembling the emperor on Marco's medal, but facing right. Here the legend identifies him: IMP[erator] SER[gius] GALBA CA[esar]. The reverse, inscribed LAVRENTI[us] SESTO • ME FECIT, displays a less ambitious version of the allegory of Venetia on Marco's medal. Lorenzo's figure lacks the wheel, and unlike Marco's she holds an orb in her right hand. Lorenzo was apparently a less gifted engraver than his brother. His emperor portrait shows little of the refinement of Marco's bust, and the type looks uncomfortably cramped within the field. The pose and drapery of his Venetia are similar to Marco's, but the proportions of Lorenzo's figure are somewhat squatter. The shared types of Lorenzo's and Marco's medals suggest that they were both produced at the same time, in 1393.¹⁸ The primary objection to a contemporary dating for the two medals is the different styles of lettering employed on them. But that may be due to Lorenzo's inferior ability; the elegant gothic capitals of Marco's legend (resembling the lettering punched into the dies for Venetian coinage) demanded much more skill than Lorenzo's ill-shaped, blocky roman ones.¹⁹

SOURCES OF THE SESTO MEDALS

The closest visual parallels to the portraits on the Sesto medals appear on the bronze coinage of Galba (Plate 20, 7).²⁰ The medallic

¹⁷ The piece came to the Berlin cabinet from the collection of Julius Friedländer (Schlosser, p. 70). We are grateful to Dr. Wolfgang Steguweit of the Münzkabinett, Staatlichen Museen, for information on the Berlin medals and photographs.

¹⁸ Supino's reference to a date of 1393 on Lorenzo's medal (above, n. 5, p. 15) is doubtless a slip caused by confusion with Marco's medal.

¹⁹ The different directions of the two portraits also suggest that the die for one was engraved using the other medal as a model, resulting in a reversal of the image.

²⁰ The source of the obverse portraits has been identified by almost all students. E. Babelon tentatively suggested Domitian, which we find unconvincing, "Les Origines de l'art du médailler," in A. Michel, *Histoire de l'art depuis les premiers temps chrétiens jusqu'à nos jours, III: Le réalisme, les débuts de la Renaissance, seconde partie* (Paris, 1908), p. 918. The Galba sestertius illustrated here is from *BMCREGalba*, p. 326, 106, pl. 56, 6; see C. M. Kraay, *The Aes Coinage of Galba*, ANSNNM 133 (1956), die A2, pl. 6.

portraits closely resemble the ancient heads of Galba, and it is only on Galba's sestertii that precisely the same treatment of the bust drapery occurs. Both the sestertii and the medals present the same rounded forehead, deep-set eyes, hooked nose, thin lips, and sagging chin. The hair is treated in much the same manner, and on Marco's medal even the details of the laurel crown and its fillet are painstakingly reproduced. The drapery on the coin portrait and the medals hangs and curves around the neck in the same way. Lorenzo's portrait bears a rather more general resemblance to the coin portraits of Galba, but the type is fundamentally similar to that on Marco's medal (and Lorenzo's legend specifically names Galba as the subject). The scale of the lettering relative to the portrait is very close on Marco's medal and the sestertius; Lorenzo's piece compresses the design into a somewhat narrower space. Though the Sesto medals evince careful attention to the iconography of Roman coinage, one would never mistake them for actual antique works. For all their vigor and technical accomplishment, their busts of Galba do not reveal quite the same subtlety of modeling as the best classical coin portraits.

The reverses of the Sesto medals are among the earliest known works that personify Venice as a female figure. The placement of Venetia atop a wheel on Marco's medal seems to have few if any artistic parallels. It has been viewed as a conflation of Venice with the attributes of Fortuna, who often appears standing on a wheel in medieval depictions.²¹ But Trajanic coins commemorating the Via Traiana depicting an allegorical female figure with a wheel were well known in the Renaissance, when they were thought to represent the Aqua Traiana and the figure's wheel was interpreted as a classical symbol of water.²² The wheel of Venetia on Marco's medal may have been meant in the same sense, as a classicizing metaphor for the city's geographical situation upon the lagoon.²³

It is difficult to suggest a specific motive for the choice of Galba as a subject. A sestertius of Galba might simply have been the best ancient

²¹ W. Wolters, *Der Bilderschmuck des Dogenpalastes. Untersuchungen zur Selbstdarstellung der Republik Venedig im 16. Jahrhundert* (Wiesbaden, 1983), p. 238.

²² *Natur und Antike in der Renaissance* (above, n. 3), p. 489.

²³ The placement of the large S C in the field to either side of the allegorical figures on Roman coins may also have suggested the similar treatment of the date on Marco Sesto's medal.

coin that came to hand. Imperial coins abounded in late medieval and Renaissance Italy, sold at prices within the reach of artists and scholars. Galba's bronzes were no exception. In his 1739 edition of Jobert's *Science des médailles*, Joseph de Bimard describes them as "common," and the same was doubtless true in the Renaissance.²⁴ A sestertius of Galba was used as a model for painted decoration by Ghirlandaio in the 1480s; in the mid-Cinquecento the medalist Giovanni da Cavino produced replicas of them.²⁵

THE SESTO FAMILY—A DYNASTY OF VENETIAN DIE ENGRAVERS

In order to better understand the original purpose of the Sesto medals, it will be helpful to review the documentary evidence concerning the brothers' lives and the history of their family. The Sesto family furnished engravers to the Venetian mint from the late fourteenth century through the end of the fifteenth. A number of previously unknown documents in the Archivio di Stato in Venice help to fill out our picture of the lives of the major members of the family.

The name Sesto probably derived from the family's place of origin. Among several towns of that name, Sesto in Friuli is the most likely candidate because of its proximity to Venice. The earliest recorded member of the family was Jacomo Sesto, who died in 1404. His epitaph, formerly in the church of Santo Stefano, named him as "intagliador alla moneda di Venesia."²⁶

²⁴ L. Jobert, *La Science des médailles*, ed. J. de Bimard, 2 vols. (Paris, 1739), vol. 2, p. 396.

²⁵ J. Cunnally, "The Role of Greek and Roman Coins in the Art of the Italian Renaissance," Ph. D. diss., University of Pennsylvania (1984), pp. 220–22.

²⁶ The epitaph is recorded in J. G. Palfer, *Memorabilia Venetiarum monumenta, antiquis recentioribusque lapidibus insculpta, per centum et sexaginta perlustratus templa, Johannes Georgius Palferus excerpit urbis decori fidelium pietati, studiosorum deliciis inservitura*, MS, Biblioteca Marciana, fol. 109, cited in N. Papadopoli, "Alcune notizie sugli intagliatori della Zecca di Venezia," *Archivio Veneto*, N.S. 18 (1888), p. 272: "MCCCCIV sepoltura de S. Jacomo Sesto intagliador alla moneda di Venesia." E. Steingraber, "Studien zur venezianischen Goldschmiedekunst des 15. Jahr-

All three of Jacomo's known sons, Bernardo, Lorenzo, and Marco, followed him at the mint.²⁷ Bernardo was apparently the oldest,²⁸ as he seems to have been working there already, or at least known there, when his brothers first appear in the mint records.²⁹ The earliest reference to Marco and Lorenzo names them as engravers of dies for silver and billon coinage, which implies that Bernardo, as the more experienced engraver, may have been working on gold ducats.³⁰

hundreds," *Mitteilungen des Kunsthistorischen Institutes in Florenz*, 10, 3 (June 1962), p. 150, n. 9 (hereafter, Steingraber) cites E. Cicogna's manuscript *Giunte alle iscrizioni veneziane* in the Correr Museum, "Chiesa di Sto. Stefano B. 1593 n. 8/n. 149 carta." An engraver at the mint hired in late 1348 or 1349 who may have been named Jacobus might be identical with Jacomo Sesto; but the latter's date of death, 1404, renders the identification unlikely, ASV, *Grazie*, R 13, fol. 46^v. The individual is called Johannes at the beginning of the document, but Jacobus at the end. A Jacomo Sesto (parish S. Marciliano) appears in a list of the members of the Scuola Piccola of San Cristoforo dei Mendicanti in a hand used from 1377 to 1423 (ASV, Scuole Piccole, B. 406, fol. 44^v).

²⁷ The relationship of the three brothers to Jacomo is given in G. Tamba, ed., *Bernardo de Rodulfis, Nolaio in Venezia (1392-99)*, Fonti per la Storia di Venezia, Sec. 3 (Venice, 1974), pp. 126-27, 121. Bernardo's will of 27 August 1432, in which he identifies himself as Jacomo's son, refers to a family tomb in Santo Stefano: ASV, Notarile Testamenti, B.1000 (Bartolomeo Tomasi), 435.

²⁸ A transcription of the act of the Greater Council recording Lorenzo's and Marco's promotion, with misleading punctuation, led Friedländer (p. 144) to the conclusion that Bernardo was the father of Lorenzo and Marco. The error has been followed by all subsequent writers on the Sesto: Schlosser, p. 69; Babelon (above, n. 20), p. 917; Hill, vol. 1, p. 4; P. Grottemeyer, "Sesto," in Thieme-Becker, *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart* (Leipzig, 1907-50), vol. 30, p. 534; Steingraber, pp. 150-51; and Pollard (above, n. 5), p. 27.

²⁹ This inference is based on the language of the act that first mentions the presence of the two brothers at the mint, calling them "Laurencio et Marcho, fratribus Bernardi Sexto," G. Bonfiglio Dosio, ed., *Il "Capitolare dalle Broche" della Zecca di Venezia (1358-1556)*, Bibliotheca Winseman Falghera 1 (Padua, 1984), p. 63 (hereafter, Bonfiglio Dosio).

³⁰ Earlier in the fourteenth century, dies for gold coins had been cut by two engravers, at least one of whom also produced the dies for silver as well. By mid-century, however, it was decreed that all dies for gold were to be carved by the better of the two engravers, while the less skillful man would engrave for silver; see A. Lombardo, ed., *Le deliberazioni del Consiglio dei XL della Repubblica di Venezia*, 3 vols., Deputazione di Storia Patria per le Venezie, Monumenti Storici, N.S. 9, 12, 20 (Venice, 1957-67), vol. 1, p. 54, 176.

The date at which Lorenzo and Marco are first recorded at the mint is 31 March 1393.³¹ This document, in the *Grazie* codex, does not refer specifically to their hiring: it says that they must come to work at the bells like the other employees of the mint. The *Grazie* seems never to have been used to record hirings of mint engravers (those generally appear in the deliberations of the Forty, not extant for this period), so what it actually seems to indicate is that the brothers were given full-time status on 31 March 1393; prior to that date they may already have been employed part-time.³²

On 13 September 1394 "Marco et Laurencio, fratribus Bernardi de Sexto" were granted a wage increase from twenty to thirty ducats annually.³³ Their raise was due to the additional work created by the new type of *grosso* introduced earlier in that year.³⁴ The document names them as engravers for *grossi*, *soldini*, and *piccoli*, with a note that they were still working full-time. In December of that year, the three brothers jointly bought a plot of land in the parish of Santa Croce, on the Giudecca island for 100 ducats.³⁵ The deed noted that the land was

³¹ It has hitherto been given as 31 March 1394, the date recorded for the Greater Council's passing of the *Grazia* in the capitulary of the mint (Bonfiglio Dosio, p. 63). The other surviving version of the act, in the *Grazie* in the Venetian archives, has marginal notes stating that it was passed by the Council on 31 March 1393 (ASV, *Grazie*, R. 18, fol. 49). The *Grazie* appears to be the more reliable of the two sources. It is a primary government document, unlike the capitulary which is a secondary compilation of documents put together for use by the mint masters. In the capitulary the records covering this period are in jumbled chronological order, and the version of the act in the *Grazie* is more detailed, suggesting that the version in the capitulary is an abridgment. Significantly, the entry in the capitulary contradicts itself on the date of the act, giving the indiction year as one, which is accurate for 1393 and not for 1394. Together these facts leave little doubt that the *Grazia* first recording the Sesto brothers' presence at the mint is correctly dated 31 March 1393.

³² While the *Grazie* records the date at which their request for full-time employment was officially approved, the volumes for this period do not record the date at which a particular request was first presented. Sometimes the lapse between the request for a *Grazia* and its final approval could be a year or two, so the date of 31 March 1393 only serves as a *terminus ante quem*.

³³ Bonfiglio Dosio, p. 64; the same document appears at ASV, *Grazie*, R. 18, fol. 84^v (repeated at fol. 93).

³⁴ For the type three *grosso* of Antonio Venier, see N. Papadopoli, *Le monete di Venezia*, 4 vols. (Venice, 1893–1919), vol. 1, pp. 348–49, 17.

³⁵ Tamba (above, n. 27), pp. 126–27, 121.

to be put to a new use. At about this time, the Venetian mint also purchased land on the Giudecca to install a workshop for the most noxious aspects of the refining process.³⁶ It seems likely that the Sestos' purchase of a plot in this remote but accessible area was also for a refinery for precious metals.

On 14 February 1405 the Venetian Senate ordered the mint to strike soldini, mezzanini, and piccoli for Verona and Vicenza, which had become vassals of the republic.³⁷ On 29 September 1405 the Collegio ordered Marco Sesto to produce the dies for the colonial coinages, compensating him with a raise from 30 ducats per year to 70.³⁸ Bernardo is explicitly mentioned in a document of 20 January 1412 as the mint's engraver for gold coins where it is recorded that he and Marco took a pay cut as part of a statewide reduction in expenses to pay for the Terra Ferma wars.³⁹ Those reductions probably did not affect the brothers too severely, as they were able to fall back upon their work as independent goldsmiths. As *orafi* the Sesto ranked in the forefront of their trade, enjoying extensive public and ecclesiastical patronage; on 18 April 1413 Bernardo, Marco "et filiis suis" received extraordinary permission to set up their workshop (*apotheca*) on the Piazza San Marco because of the site's convenience for the needs of the government and the basilica.⁴⁰

³⁶ ASV, Prov. in Zecca, R.6ter (Capitolare dei Massari all'Oro), fol. 32, c.82; ASV, Officiali alle Rason Nuove, R.1 (Capitolare), fol. 14. In neither capitulary is the date of this provision explicit; in both cases it seems to be part of a series of regulations for the gold mint enacted by the Council of Forty (whose records are not extant for this period). In the Gold Masters' capitulary these provisions are dated 16 July 1394, while in that of the Account Officials they are dated 16 July 1405. However, an act of the Senate from 1404 (ASV, Senato, Misti, R.46, fol. 136) cites one of these provisions as passed by the Forty on 16 July 1395, which is probably the correct date for all of them.

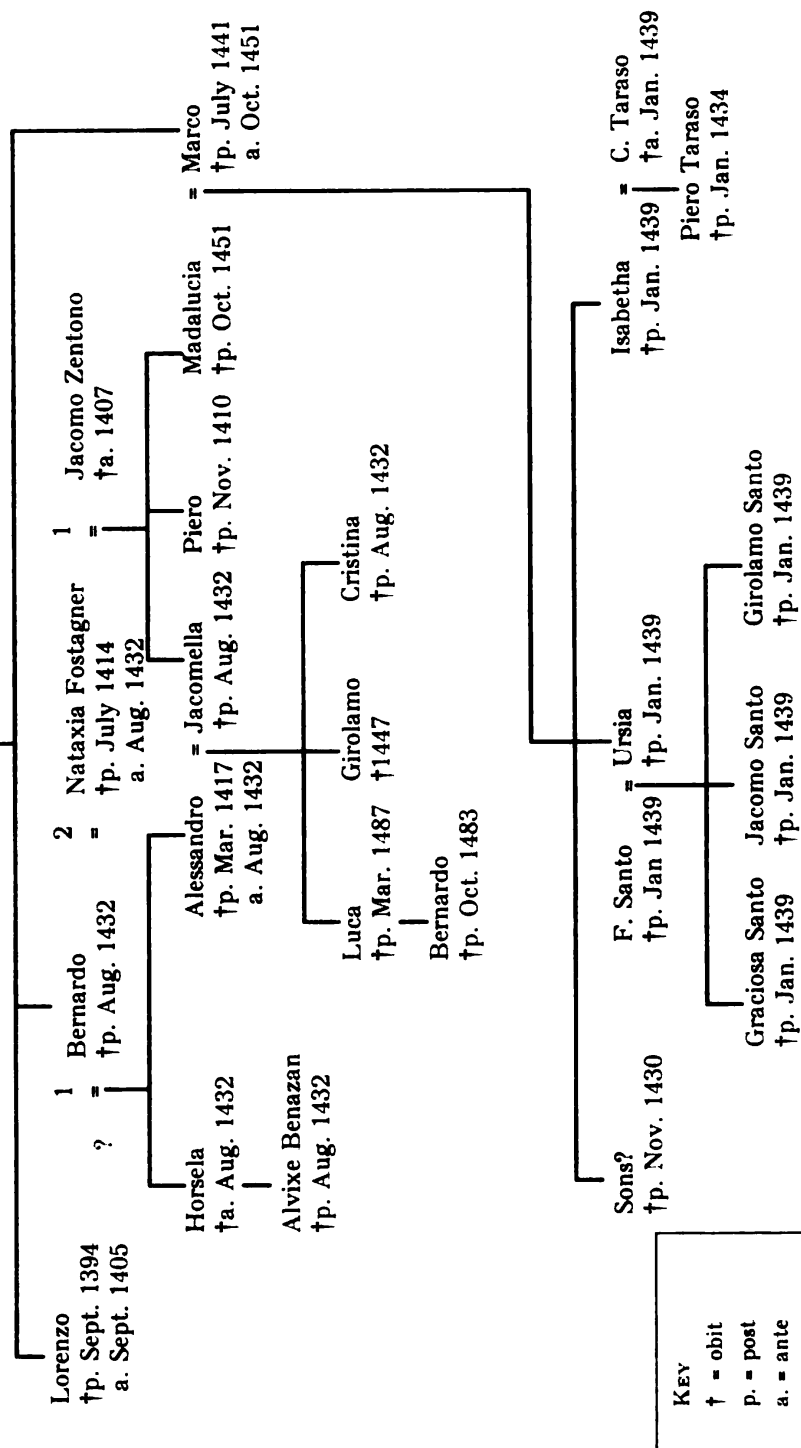
³⁷ Papadopoli (above, n. 34), vol. 1, pp. 235 and 352–53. All dates are given in modern style.

³⁸ Bonfiglio Dosio, p. 80.

³⁹ ASV, Senato, Misti, R. 49, fol. 81. The decree indicates that Marco was still at work on dies for silver coins, while Bernardo cut those for silver as well as gold. The salary of the mint master for gold was reduced from 20 lire of grossi per year to 12, the mint master for silver and copper from 8 to 5, the master of the weighers of gold from 6 to 4, the master of the weighers of silver from 7 to 5, the salary paid Bernardo by the mint master for gold from 7 to 6, and that paid separately to Bernardo and Marco Sesto by the mint master for silver and copper from 7 to 5. The lira of grossi was worth 10 ducats at this time, Papadopoli (above, n. 34), pp. 380–81.

⁴⁰ ASV, Grazie, R. 20, fol. 61.

Jacomo Sesto
†1404



Bernardo was still living in August 1432 when he made out a will.⁴¹ But Lorenzo must have died within a few years after his first mention in the mint records. The last surviving notice of Lorenzo is the purchase of land with his brothers in December of 1394. He is conspicuously absent from the documents referring to the 1405 coinage for Verona and Vicenza, the 1412 pay cut at the mint (in which both Bernardo and Marco are named), the commission for the Treviso cross (mentioning Bernardo, Marco, and Alessandro), and all the extant wills of the Sesto family from 1410 to 1439. Marco was still living as late as 13 July 1441, when he made his only known will. He was dead by 22 October 1451, when his wife Madalucia identified herself as a widow in a will of her own.⁴²

⁴¹ ASV, Notarile Testamenti, B. 1000 (Bartolomeo Tomasi), 435. By 1407 Bernardo's common-law wife (*uxorem sine stridis*) was Nataxia Fostagner, widow of Giacomo Zentono and mother of Jacomella (wife of Bernardo's son Alessandro, presumably by an earlier marriage) and of Madalucia (wife of his brother Marco), ASV, Giudici di Petizion, Sentenze a Giustizia, R. 27, fols. 53^v-55^v. In 1411 an individual pawned some silver with Bernardo Sesto, described as inhabiting the parish of San Paternian, ASV, Cancelleria Inferiore, B. 202 (Bartolomeo Tomasi), Prot. 1, fol. 114^v. Nataxia identifies herself as Bernardo's wife in her will of 1414, ASV, Miscellanea Testamenti, Notai Diversi, B. 24, 1340. Bernardo is identified as the *barba* of Antonio Sesto, goldsmith of S. Severo and son of the late Bartolomeo, in Antonio's will of 1427. If *barba* is taken literally as uncle, Bartolomeo would have been another son of Giacomo Sesto and brother to Bernardo, Marco, and Lorenzo, P. Paoletti di Osvaldo, *L'architettura e la scultura nel rinascimento in Venezia*, 2 vols. (Venice, 1893), vol. 2, p. 129 (hereafter Paoletti).

⁴² Marco's 1441 will, ASV, Notarile Testamenti, B. 565 (Bruno Felice); Madalucia's 1451 will, *ibid.*: both quoted in Paoletti, vol. 2, p. 129. In 1433 Marco is referred to as "vichario" of the Scuola Grande di San Marco, for whom he made some silver figures of saints in 1435 and 1436 (Paoletti, vol. 2, p. 129). Steingraber (p. 150, n. 10) mentions a security deposition concerning some of Marco's business made by his wife on 13 January 1407 (ASV, Cancelleria Inferiore, B. 208 [Bartolomeo Tomasi], 74). Madalucia's earlier will of 1410 makes vague mention of unnamed sons and daughters (ASV, Not. Test., B. 1000 [Bartolomeo Tomasi], 399); in her later one of 1439 we find mention of two daughters, Ursia and Isabetha, ASV, Not. test., B. 1070 [Bartolomeo Viriselli], 340. Ursia made a will of her own in January 1439, from which we learn that she was the wife of Francesco Santo and had a daughter Graciosa and two sons Jacomo and Girolamo Santo (ASV, Not. Test., B. 1070 [Bartolomeo Viriselli], 288). In her will of 1439, the second daughter, Isabetha, calls herself the widow of Cristoforo Taraso, "olim patroni navium," by whom she had a son Piero (ASV, Not. Test., B. 1070 [Bartolomeo Viriselli], 341).

THE PURPOSE OF THE SESTO MEDALS

Why did Marco and Lorenzo Sesto produce their remarkable medals? It is unlikely that it was to commemorate any past or contemporary event in Venetian history. Possibly they made them to stand in for a sestertius in some coin collector's series of Roman emperors. But since the inscription on Marco's piece does not identify its portrait as Galba and the reverse types do not replicate those of any Roman issues, it is difficult to believe that, as Roman restitutions, they would have satisfied collectors.

It is also unlikely that they were made for distribution as tokens of favor to members of the ruling nobility. Unlike the Carrara medals, the Sesto pieces are devoid of political allusions (except for the generalized symbol of the republic on their reverses). If they were intended as honorary gifts, the obverse type with Galba would seem difficult to explain, as would the prominence given to the artists' signatures.

The medals were probably not made as audition pieces for the brothers to obtain jobs at the mint. Marco's medal is dated 1393; the Venetian year began on 1 March, and Marco and Lorenzo were already employed full-time by the end of March 1393 if not earlier. The fact that the dies were engraved without the aid of letter punches is not evidence that they were made outside the mint, since the punches used for coinage were too small for the purposes of the medals. It seems more likely, since the brothers were working full-time and actively pursuing raises at the mint by 1393, that they produced their technically impressive medals to demonstrate their skill and merit to the mint officials and members of the councils who set their salaries.

A theory that the Sesto brothers worked at the Paduan mint before coming to Venice has been advanced. Its first proponent was Bolzenthall, who thought both the struck Carrara pieces and Marco's medal were products of the sixteenth century.⁴³ Schlosser, impressed by the fact that the Carrara medals and the Sesto pieces were produced in states whose fortunes were closely interwoven and with a shared debt to the antique, assigned the Carrara series to the Sesto family. There are

⁴³ Bolzenthall (above, n. 4), p. 34.

no surviving records of the engravers at the Paduan *zecca* during this period to confirm or deny the hypothesis of the Sesto brothers' employment there.⁴⁴ Comparison of the two series is complicated by the difference in format and iconography between the Paduan series of 1390, honoring living subjects in an antique vein, and the Sesto medals, reproducing a Roman coin portrait. But stylistically the Carrara pieces and the Sesto medals differ so significantly that a common origin appears unlikely. The portraits of Francesco I (Plate 19, 1) and Francesco II (Plate 19, 2) are much softer in definition than the Sesto portraits. Details of facial anatomy are less forcefully articulated in the Paduan medals, and the animated treatment of the hair of Marco's Galba could hardly be more unlike the stippling found on the Carrara portraits. The drapery is less stiffly linear on the Sesto medals than on the draped bust of Francesco il Vecchio. And the lettering on both Sesto pieces is less minutely ornamental and larger in relation to the portrait than that on their counterparts. Finally, if Marco or Lorenzo Sesto had already established their competence at the Paduan mint, one might expect their salaries at Venice to reflect their skill and experience. In fact, the salary voted for them in 1393 is consistent with that of beginning engravers at the Venetian mint over the preceding century.⁴⁵

⁴⁴ See L. Rizzoli Jun., "Artisti alla zecca dei principi da Carrara: Nicolò e Nerio Compagni da Firenze," *RIN* 13 (1900), pp. 225–38. The documents Rizzoli cites actually refer to these two individuals as the mint farmers and not, as he states, as engravers.

⁴⁵ In 1301 an engraver named Giovanni Albizo was earning 200 lire of piccoli (6.25 lire of grossi) per year (E. Favaro, ed., *Cassiere della bolla ducale, Grazie, novus liber, 1299–1305*, Comitato per la Pubblicazione delle Fonti Relative alla Storia di Venezia, Ser. 1, Archivi Pubblici [Venice, 1962], p. 40, 173). Giovanni's son Leonardo began in 1306 at a salary of 25 solidi of grossi (1.25 lire of grossi) annually; in 1309 his salary was increased to 3 lire (ASV, MC, Presbiter, fol. 10). He was raised from 3 lire of grossi to 4 in 1327 (ASV, AC, Brutus, fol. 47^v) and to 5—which is said to be the salary of his predecessor in his current position—in 1329 (ASV, Grazie, R. 3, fol. 3, 29). In 1332 the engraver Giovanni Quintavalle was granted a raise from 4 lire of grossi per year to 5, in order to give him parity with his colleagues (ASV, Grazie, R. 4, fol. 40). In 1343 an engraver for silver was hired at 5 lire of grossi per year, Lombardo (above, n. 30), vol. 1, p. 96, 303. The engraver Jacobus (or Johannes) earned from 6 to 7 lire of grossi in the years immediately following the Black Death (ASV, Grazie, R. 13, fol. 46^v). In 1356 Marco Albizo was hired as an engraver at the same salary as his

Given the Sesto brothers' distinguished and innovative medals, it is not surprising that their vanguard approach is reflected in the history of the Venetian coinage as well. A coin recently discovered in a London private collection apparently represents their proposal for the introduction of a more modern style for the *grosso* (Plate 20, 8).⁴⁶ This piece, struck in silver, is in the same format as the standard *grossi* of the period, but with it the republic's coinage stepped out of its ancient past into the splendor of gothic art. For the first time in the history of the *grosso* the crude, hieratic characters have been supplanted by graceful and well-proportioned figures. Instead of a simple pattern of engraved lines, their drapery is treated as a complex three-dimensional surface in relief, its profuse folds curving around the body to create the illusion of a figure occupying real space. Their heads match the elegance and vari-

associate, 7 lire (ASV, Grazie, R. 13, fol. 71v). In 1391 Antonio dalle Forbici, employed over sixteen years, was raised from 4 lire of *grossi* to 5; before 1381 he had earned 6 (Bonfiglio Dosio, pp. 60–61).

When the Sesto brothers are first documented as working at the mint, in 1393, their salary was set at 20 ducats (2 lire)—less than a third of the salary paid to Giovanni Albizo nearly a century before. Giovanni's son had made more than half as much as an apprentice in 1306, and when he became a master three years later he was making one and a half times as much as the Sesto brothers. It was only 17 months after their first appearance in the documents, in September 1394, that the brothers began to earn the same amount (30 ducats, or 3 lire), and it was another two decades before Marco began to make the equivalent of the 7 lire paid Marco Albizo and his associate in 1356. Even with the cut in his salary occasioned by the Fourth Genoese War, Antonio dalle Forbici had been making twice as much before 1391 as the Sesto brothers did in 1393.

Before they were taken on as salaried employees at the Venetian mint, the Sesto brothers probably began in the usual manner, as unpaid helpers to their father or to their older brother; that would explain their absence from the surviving documents before 1393.

⁴⁶ The London *grosso* is the subject of a study by A. M. Stahl, "A Fourteenth-Century Venetian Coin Pattern," *RIN* 95 (1993), pp. 597–604. We are grateful to John Porteous for permission to reproduce the coin in his collection. While the present article was in press, we learned of a second example of this issue in similar style but from different dies. In the Bibliothèque Nationale, it is illustrated in R. Paolucci, *Le Monete dei Dogi Venezia* (Padua, 1990), p. 108. We are grateful to Andrea Saccocci for calling our attention to this example. The presence of a similar specimen from different dies suggests that production of this new style *grosso* was begun and then stopped, rather than its having been rejected at the pattern stage.

ety of their robes, and—most remarkably—the ducal head appears to be a portrait of the reigning doge Antonio Venier. The pattern was certainly produced at the *zecca*, for its lettering was largely cut with punches matching those used for contemporary grossi. The advanced style of the London grosso supports the probability that it was produced by one of the Sesto brothers. It was probably made as a pattern for the grosso type three, which was ordered into production on 4 June 1394. The reason the new Sesto design was never put into production must have lain with the expense of engraving such complex dies and the Senate's unwillingness to draw attention to the new (and debased) issue. However, the punch with the portrait head of Antonio Venier reappeared later, on circulating grossi from around 1398, where it replaced the conventional type of doge's head employed on the coinage since 1379.⁴⁷ Thus while the Sesto brothers apparently spent the rest of their careers at the mint dutifully turning out conservative dies,⁴⁸ their uncoined pattern for the grosso led to the first appearance of true portraiture on a European coin since late antiquity.

Alessandro Sesto, Bernardo's son, followed in the family's métier.⁴⁹ Though not documented in extant mint records, he left a signed medal on which he refers to himself as a mint engraver (Hill 12, Plate 20, 9).⁵⁰ Like Lorenzo's medal, it is known only from an aftercast formerly in Berlin. On the obverse the head of a young man, diademed, appears with the legend **ALEXANDER • SEXSTO • INTACTOR EN • MON-CTA** • which concludes on the reverse **ME FECIT • 1417**.⁵¹ It seems

⁴⁷ See A. M. Stahl, "A Fourteenth-Century Venetian Coin Portrait," *ANSMN* 30 (1985), pp. 211–14.

⁴⁸ Even the new 1405 mezzanino for Verona and Vicenza, engraved by Marco Sesto (*Corpus Nummorum Italicorum*, 20 vols. [Rome, 1910–43], vol. 7, p. 115, 19–25, pl. IV, 17) (hereafter, *CNI*) differs hardly at all from the coin issued half a century before in the reign of doge Andrea Dandolo (*CNI*, vol. 7, pp. 69–73, 1–15, 19, 24–32, pl. III, 14).

⁴⁹ Dead by 1432, Alessandro Sesto left a wife, Jacomella and three children, mentioned in Bernardo's will of 1432 (above, n. 41): Luca (d. ca. 1487), Girolamo (d. 1447), and Cristina.

⁵⁰ See J. Mader, *Kritische Beiträge zur Münzkunde des Mittelalters*, 6 vols. (Prague, 1803–13), vol. 5, p. 163, fig. 43; Bolzenthall, pp. 34–35; Friedländer pp. 143–44; Schlosser, pp. 70–71; Babelon (above, n. 20), p. 919; Hill, 12.

⁵¹ As on the Venetian coinage and on Marco's medal, Gothic majuscule is used. Except for the date, the legend appears to have been produced with punches.

plausible that the head is intended for Alessandro's namesake, Alexander the Great. Schlosser first noted the resemblance of the bust to portraits on the coins of the Seleucids. The medal's reverse shows a nude man carrying off a draped woman; the forepart of a dragon appears at right. This scene has been variously identified as the rape of Persephone or the rescue of Andromeda by Perseus. Iconographically it suggests another Greek numismatic prototype, the archaic staters of Thasos which represent a satyr abducting a nymph (Plate 20, 10).⁵² The style of Alessandro's reverse has led some people to suggest, without compelling evidence, that he was the creator of a large series of bronze tokens from the Veneto.⁵³

Alessandro's sons contributed a fourth generation of Sesto die engravers to the Venetian mint. Girolamo engraved dies for silver until his death in 1447,⁵⁴ and Luca's recorded activity spans three decades.⁵⁵ On 27 October 1483, Luca, named as engraver for both gold and silver, was granted his request to have his son Bernardo hired to work in his place, at the same rate of pay, whenever the old master's age and infirmity prevented him from coming in to work.⁵⁶ Luca Sesto died around March 1487, at which time Alessandro dei Leopardi was appointed to his post.⁵⁷ That he was not replaced by his son Bernardo, as one might expect from the provisions of the 1483 concession, suggests that Ber-

⁵² See British Museum, Department of Coins and Medals, *A Guide to the Principal Coins of the Greeks from circ. 700 B.C. to A.D. 270 Based on the Work of Barclay V. Head* (London, [1959]), p. 6, pl. III, 2-4; C. M. Kraay, *Archaic and Classical Greek Coins* (Berkeley and Los Angeles, 1976), pp. 148-50, pl. XXIX, 518-21. The staters resemble the medal in their depiction of the male figure from the side, with the legs and skirt of the flailing woman visible behind the man's torso. Though the Greek engravers followed the archaic convention of representing a running figure in a kneeling posture, the position of the satyr's legs is not that dissimilar to the stance of Alessandro's figure. No mention of this coinage is known in Renaissance inventories, but later coins from Thrace appear in them (Cunnally [above, n. 25], pp. 126-27).

⁵³ Friedländer, pp. 146-47; Schlosser, pp. 71-74, 1-28; Babelon, p. 920.

⁵⁴ Bonfiglio Dosio, pp. 131-32.

⁵⁵ Papadopoli (above, n. 26), p. 273; Paoletti, vol. 2, p. 129; Bonfiglio Dosio, pp. 141, 144, 173, and 206.

⁵⁶ Bonfiglio Dosio, pp. 199-200. This provision states that Bernardo had already been filling in for his father, and it allowed Bernardo to assume his father's position at the same salary in the event of the latter's death.

⁵⁷ Bonfiglio Dosio, pp. 219-20.

nardo did not survive him. With the death of Luca the documented history of the Sesto dynasty comes to a close.⁵⁸

THE GOLDSMITH'S WORK

Bernardo, Marco, and Alessandro Sesto are all known to have been active in the family goldsmithing shop, which was evidently one of the foremost such firms in Venice. Bernardo and Marco Sesto produced a silver processional cross for the Cathedral of Venzona in Friuli, signed and dated 1421 (Plate 21, 11).⁵⁹ The Venzona cross survived until recent times, only to be stolen from the church in 1973. Fortunately, photographs preserve some idea of its appearance. On the front Christ appears, flanked by Mary, John, and mourning angels, and in the lobes are the symbols of the Evangelists. The figures on the cross have a substantiality that evokes monumental sculpture, and they are robed in the same type of busy, mobile international gothic drapery that appears on the reverse of Marco's medal and on the London pattern grosso. A Madonna and Child stand in the center of the cross's back, surrounded at the extremities by half-length figures of saints. The knop is a hexagonal gothic structure with pointed arches housing tiny statuettes. A signature—not visible in photographs—has been recorded on

⁵⁸ Various goldsmiths named Sesto appear in other documents. Four men with the family name Sesto appear among the non-noble members of the Scuola Piccola of Santa Maria della Celestra, listed in a hand used from about 1331 to 1362: the goldsmith Gasparo (parish of S. Simeon Prophet), the goldsmith Thomas (S. Giovanni in Bragola), the silk draper (*samiter*) Natal (S. Antonin), and Antonio (S. Giovanni in Bragola), ASV, Scuole Piccole, B. 726 (unfoliated). A Venetian goldsmith named Antonio Sesto was active in Cividale 1452–54, see V. Joppi, "Contributo quarto ed ultimo alla storia dell'arte nel Friuli ed alla vita dei pittori, intagliatori, scultori, architetti ed orefici friuliani dal xiv al xviii secolo," in *Monumenti storici*, Series 4, *Miscellanea*, Appendix to vol. 12 (Venice, 1894), p. [155]. Carlo Kunz attributed several jeton-like pieces to a Tiberio di Marco Sesto, see J. Neumann, *Beschreibung der bekanntesten Kupfermünzen*, 6 vols. (Prague, 1858–72), vol. 5, pp. 82–83, but no such individual appears to be documented.

⁵⁹ Steingraber, pp. 148–52; P. Bertolla and G. C. Menis, *Oreficeria sacra in Friuli*, exh. cat., Museo Diocesano d'Arte Sacra (Udine, 1963), pp. 72–73, 77; G. Ganzer, *Il tesoro del Duomo di Gemona* (Udine, 1985), pp. 8–10 (with photograph reversed). We thank Dr. Jasminka De Luigi for information on this piece and on other works of Venetian goldsmiths of the period.

Our Lady's pedestal, transcribed by Steingraber as "Bernardo et Marcho Sesto fecit 1421."⁶⁰ Bertolla and Menis, in their description of the cross, note that "si osservi . . . il loro marchio sullo stello"; though they do not describe the mark, we may suppose it was a compass as on Marco's medal and Bernardo's will.⁶¹ The survival of the Venzone cross allowed Steingraber to assign several other works at least provisionally to the Sesto workshop. The attributions include other crosses at Venzone and Verona, the reliquary of the Holy Blood in San Marco, and several chalices, one of which was made for the Sesto's parish church of San Paternian.⁶²

In the early nineteenth century a signed processional cross produced by the Sesto for the Dominican convent of San Nicolò in Treviso was recorded by a local historian.⁶³ From his description it appears that the Treviso cross was comparable, if not superior, to the Venzone cross in the splendor of its decoration. Two palms high by one wide, made of gilt silver, its front bore the crucifixion flanked by Mary, John, and two half-length angels. The lobes of the cross contained the symbols of the Evangelists, and its whole body was elaborately decorated with enamel, coral, and pearls. The knop was fashioned like a gothic building with superimposed arcades enclosing tiny statuettes of angels and saints. The back of the cross was adorned with figures of Saints Dominic, Peter Martyr, and Thomas Aquinas and Pope Benedict XI. At one edge

⁶⁰ Steingraber, p. 151; Bertolla and Menis (above, n. 59) p. 72. The ungrammatical "fecit" with dual subject is a mistake not uncommon in medieval signatures of artists. G. M. Urbani de Ghelthof, *Les Arts industriels à Venise au Moyen Age et à la Renaissance: Notes*, tr. A. Cruvellé (Venice, 1898), p. 22, read the inscription as "Bernardo di • Marcho Sesto fecit. 1402," but all subsequent writers give the date as 1421; no Bernardo di Marco is anywhere documented.

⁶¹ Bertolla and Menis, (above, n. 59), pp. 72–73 and 77.

⁶² Steingraber, pp. 152–71. Two additional crosses have recently been associated with the Sesto workshop. One is in the Carmine church in Bergamo, see Fr. Kirchweger, "Croce in cristallo di rocca," in *Omaggio a San Marco: Tesori dall'Europa*, ed. H. Fillitz and G. Morello, exh. cat. of the Palazzo Ducale, Venice (Milan, 1994), p. 239, 113. The other is from the Scuola di San Giorgio degli Schiavoni, see R. Barison, "Croce di San Giorgio degli Schiavoni, also in *Omaggio a San Marco*, p. 244, 117.

⁶³ [D. M. Federici], *Memorie trevigiane sulle opere di disegno dal mille e cento al mille ottocento per servire alla storia delle belle arti d'Italia*, 2 vols. (Venice, 1803), vol. 1, pp. 170–71.

appeared the goldsmiths' signature: *Bernardus, Marcus, Sexti-recru*.⁶⁴ The word *recru* probably stands for *recrustaverunt* (refaced) and the Sesto may have been recycling the material from an earlier cross, a practice known from contemporary documents.⁶⁵ The historian who described the Treviso cross also transcribed a document of 18 March 1417 from the archives of San Nicolò recording its commission from Bernardo, Marco, and Alessandro Sesto.⁶⁶

THE ART OF THE SESTO BROTHERS

The Sesto brothers' medals, the London pattern, and the Venzone cross show that the Venetian engravers were fully abreast of the advanced art of their day. Their work presents notable parallels with the work of the leading contemporary sculptors at Venice, Pierpaolo and Jacobello dalle Massegne.⁶⁷ The dalle Massegne brothers brought to the Veneto an innovative style of sculpture characterized by physical movement, incisively individualized facial types, and vigorously three-dimensional and dynamic draperies. The kneeling statue of Doge Antonio Venier in the Museo Civico Correr, attributed to the dalle Massegne, reveals that like the Sesto brothers they took a keen interest in portraiture.⁶⁸ Their most important commission, the sculptural decoration of the iconostasis of San Marco, was executed around the same time as the Sesto medals (it bears the dates 1394 and 1397). A comparison of

⁶⁴ Federici (above, n. 63) transcribes the signature slightly differently: *Bernardus & Marcus, Sexto-recru*. He describes the script as "stringy Greek letters"—probably the gothic majuscule that appears on the medals of Marco and Alessandro.

⁶⁵ Federici (above, n. 63) restores it as *recruderunt*, which does not occur in C. Du Cange, *Glossiarum mediae et infimae latinitatis*, 10 vols. (Graz, 1883–87; rpt. 1954) or the *Thesaurus Linguae Latinae*. For the remaking of objects in precious metal, see J. M. Fritz, *Goldschmiedekunst der Gotik in Mitteleuropa* (Munich, 1982), pp. 26–28.

⁶⁶ Federici (above, n. 63), p. 182, 2.

⁶⁷ On the dalle Massegne, see J. Pope-Hennessy, *Italian Gothic Sculpture*, 3rd ed. (New York, 1985), pp. 31–32, 203–4, and 280; W. Wolters, *La scultura veneziana gotica*, 2 vols. (Venice, 1976), vol. 1, pp. 62–74. The executors of Pierpaolo dalle Massegne's 1403 will included "Bernardo Sesto mio compare de la contrada de Santa Maria Zubanigo," who may be identical with Bernardo di Jacomo Sesto, ASV, Notarile Testamenti, B. 729 (Gasparino Manis, Prot.), fol. 47, cited in Paoletti, vol. 1, p. 4.

⁶⁸ For the statue of Venier, see Wolters (above, n. 67), vol. 1, pp. 64 and 220, 142; vol. 2, figs. 432–33.

the St. Andrew from the iconostasis (Plate 20, 12) with the St. John of the Sestos' Venzone cross (Plate 21, 11) reveals how nearly allied were the styles of the two workshops. Both figures are marked by a vigorous contrapposto stance. As they draw their mantles across their bodies, the fabric is drawn into long tubular folds that are modeled as solid, undulating forms. But in both works the expanses of drapery fulfil more than a decorative function; their dynamic movement leads the eye around the figures, and their alternating tense and relaxed folds emphasize the solidity and agitation of the bodies underneath. The links between the Sesto and the dalle Massegne, working side by side for Venice's basilica and government through the late fourteenth century and the opening years of the fifteenth, reveal the goldsmith-medallists' position in the forefront of North Italian gothic art.

The Sesto also had contacts with contemporary Tuscan sculpture, in which a parallel stylistic revolution was brewing after the turn of the fifteenth century. Lorenzo Ghiberti is said to have visited the Sesto on a trip to Venice in 1430, when Bernardo, Marco, and Alessandro's two sons were all still active.⁶⁹ Ghiberti shared the family's keen interest in antiquity; and Vasari relates that he took great pleasure in making dies which imitated ancient coins.⁷⁰

The work of the Sesto family raises intriguing questions about the history of the medal. Were their early experiments and the other medals struck before Pisanello a "false dawn," or did they act as a stimulus to the development of medallic art in the Quattrocento? Could examples of their work have been known to Pisanello—himself such an avid collector of ancient coins—and other practitioners of the new medium? Could other medallic incunabula survive that are as yet unrecognized, perhaps hidden in coin cabinets among "Roman fakes and forgeries?" Further research along these lines will, it is hoped, bring to light important new works, new artists, and new facts about the medieval origins of the art of the Renaissance medal.

⁶⁹ For Ghiberti's meeting with the Sesto, see G. Fiocco, "I Lamberti a Venezia, II, Pietro di Niccolò Lamberti," *Dedalo*, 8, 6 (November 1927), p. 346. In a communication cited in R. Krautheimer and T. Krautheimer-Hess, *Lorenzo Ghiberti*, 2nd ed., Princeton Monographs in Art and Archaeology 21 (Princeton, 1982), pp. 6–7, n. 3, Fiocco gave the source of this information as Pietro Paoletti di Osvaldo, who apparently never published the documentary evidence.

⁷⁰ G. Vasari, *Le vite de' più eccellenti pittori, scultori ed architettori*, ed. G. Milanesi, (Florence, 1906), vol. 2, p. 223: "dilettosi ... di contraffare i conii delle medaglie antiche."

COINS FROM THE EXCAVATIONS AT LA ISABELA, D. R., THE FIRST EUROPEAN COLONY IN THE NEW WORLD

(PLATES 22-25)

ALAN M. STAHL

La Isabela was a settlement founded by Christopher Columbus in 1493 on his second voyage and abandoned by the end of the decade.¹ The site, on the north coast of the Dominican Republic about 80 kilometers west of Puerto Plata, has been identified and investigated for at least a century. Systematic excavation and analysis of finds have been under way since 1987. As of March 1992, 78 coins contemporary with the settlement had been found and catalogued; they remain at the site with other artifacts pending possible future removal to a museum

¹ A map of the site indicating coin finds is on p. 207. A preliminary note on the site is Elpidio José Ortega, *La Isabela y la arqueología en la ruta de Colón* (San Pedro de Macoris, 1988). The first published report on the current excavations is Kathleen A. Deagan, "Europe's First Foothold in the New World: La Isabela," *National Geographic* 181 (1992), pp. 40-53. The research on which this is based has been funded in part by National Endowment for the Humanities Grants # RO-21831-89 and RK-20135-94, by the National Geographic Society, by the University of Florida, and by the Dirección de Parques Nacionales de la República Dominicana. We wish to thank the National Park Service of the Dominican Republic and Professor José M. Cruxent for permission to use the results of excavation at the National Park, "Solar de la Americas." I wish to thank Professor Deagan, William Phillips, Jr., Mercedes Rueda Sabater, and James Todesca for their assistance in preparing this report.

within the Dominican Republic.² These coins are all European issues of the late Middle Ages. They offer important documentation both for the chronology and use of the site and for the circulation of low denomination coinage within the Iberian peninsula at the end of the fifteenth century. In order to establish the context of these finds, it will be useful to review the historical and archaeological evidence of the settlement, before moving to numismatic considerations.

LIFE AND MONEY AT LA ISABELA

When Columbus sailed from Spain in September of 1492 he anticipated finding a new route to known kingdoms; the only settlement he could have anticipated creating was a trading outpost of the type Italians and other merchants had established in non-Christian lands.³ Near the end of this voyage, on Christmas day 1492, the Santa María foundered on the north coast of Hispaniola, in what is now Haiti. Columbus had a fortress built there of salvaged planks, which he named La Navidad in honor of the date, and left behind 39 men at this unintended settlement.⁴

The following spring, barely half a year after his original departure, Columbus had returned to Spain and was organizing a second voyage. Now, however, he made plans to establish an independent, self-sufficient colony in lands which, though still claimed to be part of the fabled Asian realms, he realized would offer little in the way of civilized ameni-

² Seventeen modern coins were also found in the excavations, ranging in date from 1904 to 1984 — they have been omitted from this catalogue. In addition, two pieces of the reign of Charles V from the mint of Santo Domingo are among the coins in the museum and have been erroneously reported as coming from the excavation — they were both brought to the site from the nearby village of El Dieguito.

³ For general information on Columbus's life and voyages, including the founding and supply of La Isabela, see Samuel Eliot Morison, *Admiral of the Ocean Sea*, 2 vols. (Boston, 1942); Carl Ortwin Sauer, *The Early Spanish Main* (Berkeley and Los Angeles, 1966); and William D. Phillips, Jr., and Carla Rahn Phillips, *The Worlds of Christopher Columbus* (Cambridge, 1992).

⁴ The site of La Navidad has recently been identified and excavated. The first published notice is Kathleen Deagan, "Columbus's Lost Colony," *National Geographic* 172 (1987), pp. 672–76. No coins were found at La Navidad.

ties for settlers. Though his major concern was to provide a mechanism for the exploitation of the rich gold resources he believed he had located on the island of Hispaniola, he also made provision for establishing three or four towns there which would be secure militarily and self-sufficient for food.⁵

When the new fleet arrived back at La Navidad, they discovered that the settlers had all died, victims of battles among themselves and with natives. As this site was clearly not propitious for permanent settlement and lands to the east were reputed to be rich in gold, the fleet continued along the coast. After almost a month of painfully slow sailing into the wind, they arrived at a promising bay and, on January 2, 1494, debarked on a promontory which Columbus named La Isabela in honor of his royal sponsor. According to his own account, Columbus immediately ordered built a watch tower, a storehouse for supplies and munitions, a church, a hospice, and a strong house for his own use.⁶ He divided the remaining land into plots and instructed each settler to construct his own thatch-roofed hut.

Little is known of the financial arrangements with the settlers at this new colony or the role of coinage in its economy. Morison assumed it to have been more-or-less a continuation of ship-board conditions, with more than 1,200 men receiving rations from the warehouse and having their salary accumulate at home: "Of course there would have been no sense in paying the men off in Hispaniola where there was nothing to spend money on; all of it would have fallen into the hands of the most skillful gamblers."⁷

Some documents from the period of La Isabela's occupation, however, indicate that coinage was indeed used at the site in the normal course of life. Just a month after founding the settlement, Columbus sent a letter back to Ferdinand and Isabella in which he asked for certain supplies to be sent.⁸ He noted that the expedition's physician,

⁵ Christopher Columbus, *Memorial for the Second Voyage*, ed. Cesare de Lollis, *Scritti di Cristoforo Colombo*, Raccolta di Documenti e Studi pubblicati dalla R. Commissione Colombiana, part 1, vol. 1 (Rome, 1892), pp. 136–38; the dating of this document to April 1493 is circumstantial.

⁶ See the version of his log preserved by his brother Ferdinand, in de Lollis (above, n. 5), pp. 161–62.

⁷ Morison (above n. 3), vol. 2, p. 57.

⁸ The Torres Memorandum, with royal responses of January 1495, is published in de Lollis (above, n. 5), pp. 270–83.

Dr. Chanca, was in need of his royal salary, and the monarchs authorized Columbus to pay it to him at La Isabela. For three sailors whom Columbus promoted in the course of the expedition (Mosén Pedro Margarit and men identified as Gaspar and Beltrán), the monarchs approved a new salary and specifically instructed him to pay with funds which he had with him in the New World. In the case of Pedro Fernando Coronel, appointed Constable ("Alguazil") of the Indies, Columbus asked for such funds to be shipped to him to cover the higher salary. The monarchs approved the new salary but added that they would pay it when they gave Coronel the rest of his pay, presumably on his return to Spain. In a later letter written from La Isabela, Columbus defended himself against charges leveled against him by the rebellious official Francisco Roldán.⁹ To a charge that he had taken eight pigs from settlers about to return to Castile, Columbus responded that he had paid for them at the appropriate rate of 60 maravedi apiece. It appears, then, that from the first, coinage was used and desired at La Isabela, though at least some of the pay of the settlers was held in Spain for their eventual return.

More on the use of coinage in the colony can be learned from the preparations Columbus made for the third voyage after his return to Spain in 1496. Though he had already become disillusioned with the site of La Isabela and had instructed his brother Bartholomew to move the capital to the south shore of the island during his absence, the provisions he worked out with the King and Queen in 1497 no doubt reflect the conditions he had left behind at La Isabela.¹⁰ Three hundred men of specified professions were to be taken to the colony with royal salary, as well as 30 women and an unspecified number of unsalaried freed convicts. These new settlers were to take with them enough grain to make bread for themselves and to sell the surplus to the Christians who were in Hispaniola already. In addition they were to be given two

⁹ Ed. de Lollis (above, n. 5), part 1, vol. 2 (Rome, 1894), p. 57.

¹⁰ Versions of these plans can be found in: *Il codice dei privilegi di Cristoforo Colombo*, ed. L. T. Belgrano and M. Staglieno, Raccolta (above, n. 5), part 2, vol. 2 (Rome, 1894), pp. 36–41; Martín Fernández de Navarrete, ed., *Collección de los viages y descubrimientos que hicieron por mar los Españoles*, vol. 2 (Madrid, 1825), pp. 182–85; Bartolomé de las Casas, *Historia de las Indias*, ed. Agustín Millares Carlo, vol. 1 (Mexico, 1951), pp. 435–38.

maravedi per day to buy other food, presumably the crops which were being grown there by the earlier settlers. Moreover, they were to be given sums of money in Spain to buy provisions which they could sell when they got to Hispaniola, with prices set at 15 maravedi per "azumbre" of wine, 8 maravedi per pound of bacon, and prices for other commodities to be fixed by Columbus. The money thus gained in the colony was to be turned over to the royal treasurer in the Indies as recompense for the original grant.

Most remarkably, these provisions of 1497 called for the establishment of a mint in the New World and for the use there of special lead tokens to record tribute payments. The monarchs ordered that mint workers, dies, and equipment travel to the Indies so that gold found there could be coined on the spot into excelentes "de Granada" according to the new standards promulgated at the same court session at Medina del Campo. Twenty workers of gold were to be enlisted for the voyage, and payment was authorized for each for six months at the rate of 30 maravedi per day for salary and 12 maravedi per day expenses. The lead tokens or badges ("pieza o señal de moneda de latón o de plomo") were to be worn by Indians as a sign of having paid the required tributes.

Most of the ships which left Spain as a result of these provisions never made it to La Isabela. By the time the fleet arrived at Hispaniola in mid-1498, Santo Domingo was established as the capital of the Indies, and the new workers must have been settled there. There is no indication that either the minting of gold coins or the issue of lead badges was actually carried out. The first coinage produced in the New World followed an authorization of 1535 to establish mints in Mexico and Santo Domingo.¹¹ Nevertheless, it is clear from these provisions that circulating coinage was considered a normal part of colonial life during the period of the occupation of La Isabela.

In November 1498, according to Bartolomé de las Casas, Columbus left his new capital of Santo Domingo to visit the old settlement of La Isabela. We are not told what he found there.¹² By the time las Casas

¹¹ J. T. Medina, *Las monedas coloniales hispano-americanas* (Santiago de Chile, 1919), pp. 13-14, 54-57, and 115-19.

¹² Las Casas (above n. 10), vol. 2, p. 93 and Morison (above, n. 3), vol. 2, p. 176. Columbus apparently nurtured hopes of reviving La Isabela as late as 1499; cf. Sauer (above, n. 3), p. 101.

was writing in the mid-sixteenth century, the site was considered haunted, and stones had been taken from the abandoned buildings for the new settlement of Puerto Plata, 80 kilometers to the east. Between its founding in 1494 and Columbus's last visit in 1498, La Isabela is known to have been visited by fleets in June of 1494 (Bartholomew Columbus's arrival), the fall of 1494 (the provision fleet under Torres), and July of 1496 (three ships bearing orders to transfer the capital to Santo Domingo).¹³ The coins found in the excavations at the site must have arrived on these occasions and must have been removed from circulation in Spain in the period 1493 to 1498.

THE CONTEXT OF THE NUMISMATIC FINDS AT LA ISABELA

The excavations at La Isabela have been carried out over the past five years under the direction of José F. María Cruxent of the Universidad Francisco de Miranda of Venezuela and Kathleen A. Deagan of the University of Florida. Two areas have been excavated: the Plaza area, long known to have been the site of the main buildings, and the Las Coles site, several kilometers across the bay, interpreted as an agricultural out-settlement and where the remains of the first European pottery kiln in the New World have been found. All of the coins were found in the Plaza area.

The Plaza area itself is, and apparently always has been, divided into two sections: the area of official stone buildings known as the "Solar de las Americas," now under the protection of the Dominican National Park Service, and the "Pueblo," originally the site of the thatched-roof huts of the colonists and now occupied by the similar homes of the residents of the village of El Castillo. The Solar area has been fully excavated, while the Pueblo area has been the subject of a systematic survey and full excavation of sample test holes. Within the Solar, the foundations of the watch-tower, the storehouse (Alhóndiga), the church, and Columbus's house (the Castillo) have been identified and partially restored. The context and stratigraphy of this area, however, were disturbed in the middle of the present century when bulldozers were used

¹³ Morison (above, n. 3), vol. 2, pp. 164, 167, and 294.

to level the area in anticipation of a visit from the dictator Trujillo. Much of the occupation level, as well as the overburden, was shoveled over the cliff into the sea, leaving only a small stratum of soil in place, and some of that disturbed.

From the excavations, more than 500,000 artifacts of European and native manufacture have been catalogued and identified, among which are 78 coins of late medieval Europe. Inferences from the site distributions of these finds need to be considered in terms of the disruption of much of the Solar area discussed above and the fact that the concentrations of other artifact finds have not yet been mapped. Nine of the coins were found to the north of the Solar site, where they may have been moved by the bulldozer (see map). While 38 of the remaining coins are from the public Solar area, a significant 31 pieces come from the Pueblo area, the site of the simple huts of the settlers. Of the four fine silver coins, the largest, a real of Henry IV (1), was found in the Pueblo, while two others (the half real of Ferdinand and Isabella [64] and a half real of Henry IV [3]) were found in the Solar just north of the Castillo and east of the church. The fourth silver coin, a broken half-real of Henry IV (2), was found in the area to the north of the Solar and may have been moved there by the bulldozers.

The billon coins tend to be concentrated in three locations, but this may be a result of the disruptions of context in the Solar area and the sampling nature of the excavations in the Pueblo. Seventeen of the billon pieces from the Solar are from a relatively limited area about half way between the Alhóndiga and the church. Among these is a set of five coins from one find spot, a set of three from another find spot, and two sets of two. The nature of the site makes it impossible to determine if these were single losses or group deposits. The function of this area is not known, and it would be a logical spot for a market for the kinds of supplies such as fresh vegetables and meat which would have been purchased as supplements to the provisions issued from the Alhóndiga nearby. It may be significant that four of the six Portuguese coins (67, 68, 69, and 70) and one of the two Italian pieces (74) were found in this area. The finds of billon coins in the Pueblo form two clusters, with no coins found together and no apparent pattern of distribution.

THE COINS FOUND AT LA ISABELA

Four of the 78 coins found at La Isabela were large silver coins of high denomination, known as "white money" in the later Middle Ages. The rest were of an alloy containing a small amount of silver and the rest mainly copper, what we call billon today and what was then known as "black money." No gold coins were found. This overwhelming predominance of petty currency is typical of medieval habitation sites, where excavated coins are usually the result of unretrieved loss, much more likely for a dark piece of little worth than for a large, bright, highly valued silver or gold coin.

The four silver coins are all of the kingdom of Castile and Leon, three of Henry IV (1454–74) and one of Ferdinand and Isabella from the period before they unified the coinage of their merged kingdoms. The earliest silver coin (2) is a broken half real of the early part of Henry's reign. There is no doubt that this is of Henry IV and not his grandfather, because the titulature reads "Enricus Quartus Dei Gracia."¹⁴ That this is an early issue is demonstrated by the lack of the legend "Christus Vincit, Christus Regnat, Christus Imperat," called for on all coins of silver and billon in the Segovia ordinance of 1471.¹⁵ The other two silver coins (1 and 3) of this reign do have the required reverse legend, so must be seen as having been minted in the period 1471–74.¹⁶ At the rate of 67 reales to the mark specified in the 1471 ordinance, the real should weigh about 3.43 grams; the 3.2 observed for the relatively unworn and uncorroded coin 1 is in line with this standard.

Coin 64, a silver half real, is the only excavated coin in the names of Ferdinand and Isabella, who had ruled Spain for almost two decades

¹⁴ Cf. Aloïss Heiss, *Descripción general de las monedas hispano-cristianas*, 3 vols. (1865–69, rpt. Saragossa, 1962), vol. 1, pl. 15, 21.

¹⁵ *Cortes de los antiguos reinos de León y de Castilla*, ed. Real Academia de la Historia, vol. 3 (Madrid, 1866), no. 26, pp. 812–34. For a discussion of the discrepancy between the reading "Ihesus" in the document and "XPS" on the coins, cf. Pío Beltrán, "El vellón castellano desde 1474 a 1566," *Numisma* 3, 7 (April 1953), pp. 12–13.

¹⁶ This real issue was attributed correctly by Heiss (above, n. 14), pl. 15, 20; but the half real was assigned by him to Henry III because of its lack of "Quartus" in the legend, pl. 10, 14; as we shall see, the billon blancas, which are clearly of Henry IV, also lack the ordinal, so this criterion is invalid.

when La Isabela was founded. The explanation for the paucity of their coins in the excavation, and presumably in Spain at the time of the fleets' departures, is the rulers' conservatism in monetary innovation. Their first monetary decree, in 1475, was to fix the value of the coinage minted by Henry IV, devaluing the pieces in respect to the unit of account, the maravedi, but authorizing their circulation.¹⁷ Soon, they instructed their mints to issue gold and silver coins of the same alloys and weight as those of their predecessor, but with the names and images changed to identify themselves.¹⁸ They made no response to an entreaty by their procurators in February 1480 that they mint low denomination coinage ("moneda menuda") to meet the needs of their subjects.¹⁹ In May 1480, the Catholic Kings specifically noted that, though they wished ultimately to join the coinage of the merged kingdoms, for the present they intended no innovations.²⁰

The half real of Ferdinand and Isabella found at the site follows the basic appearance of the later issue of Henry IV. The obverse is a monogram of both monarchs, with an appropriate religious quotation, "Quos Deus Conjungit...." The reverse bears the arms of Castile and Leon only, an indication that Aragon had not yet been included in the monetary system. At a weight of 1.6 g it is at the appropriate standard. At the famous court session at Medina del Campo in June 1497, the monarchs instituted a major reform of the coinage, which standardized the issues for the realm, now including Granada and, of course, the New World.²¹ They prescribed completely new types and standards for the gold and silver denominations and authorized the first minting of base

¹⁷ Tomás Dasí, *Estudio de los reales de a ocho*, vol. 1 (Valencia, 1950), no. 3, pp. iii-iv (Segovia, 20 Feb. 1475).

¹⁸ Dasí (above, n. 17), no. 10, pp. vi-viii (Cordoba, 23 May 1475).

¹⁹ Dasí (above, n. 17), no. 55, p. xxiv (Toledo, 6 February 1480). This document makes it clear that the mention of billon coins in the 1475 ordinance was merely to retariff the existing pieces, rather than to authorize the minting of new ones. This was recognized by Pio Beltrán (above, n. 15), p. 13, but the early minting of billon by Ferdinand and Isabella has been argued by Octavio Gil Farres in his *Historia de la moneda española*, 2nd ed. (Madrid, 1976), pp. 376-77, and more recently in his "Los españoles en las indias occidentales," *NAC* 12 (1983), pp. 314-17. The lack of any such billon at La Isabela would seem to confirm Beltrán's interpretation.

²⁰ *Cortes* (above, n. 15), vol. 4 (Madrid, 1882), no. 2, p. 185, c. 111.

²¹ Dasí (above, n. 17), no. 76, pp. lv-lxxix.

billon coinage in their own names. It was at this same sitting that they authorized Columbus to take the workmen necessary to set up a mint in the Indies. If any of the new coins authorized at this court were ready by the time the fleet left Spain less than a year later, they would probably have been borne to the new capital of Santo Domingo; none have been found at La Isabela.

The most common coin found in the excavations (60 of the 74 identified issues) is a piece about 20 mm in diameter, weighing about 1 g, apparently mostly of copper. One side bears the name *Enricus* and titles around a castle within a rhombus and a letter or symbol below. The other side has an abbreviated (and often blundered) version of the "*Christus Vincit...*" legend around a rhombus containing a rampant crowned lion. Heiss attributed this coin to Henry III (apparently because of the lack of "*Quartus*" in the legend).²² The issue, however, exactly fits the description of the new *blanca* promulgated by Henry IV in 1471.²³ These were to be of a billon alloy of 0 pennyweight 10 grains fineness, that is 10/24 of 1/12 of pure silver, or about 3.5% silver, the rest copper. They were to be cut at 205 to the mark (of 230 g), so should weigh about 1.12 g each. One side was to bear the king's name around a castle within a squared border ("*orla quadrada*") with an initial or symbol under the castle to indicate the mint city; the other side was to bear the "*Christus Vincit*" legend around a lion within a squared border. Each *blanca* was to be worth half a *maravedi* in the system of account. In 1475, Ferdinand and Isabella retariffed the *blancas* of Henry IV, making each one worth one third of a *maravedi*.²⁴

The *blanca* of Henry IV of 1471 was a major attempt at a restoration of the petty currency. At the beginning of his reign, in 1455, there had been complaints that the *blancas* minted at various mints were of unequal value and that some were refused by the populace.²⁵ The king

²² Heiss (above, n. 14), vol. 1, pl. 10, 25.

²³ *Cortes* (above, n. 15), vol. 3, p. 815, c. 4. The reference in the text to the coins with "*orlas quadradas*" as *medias* is clearly a scribal error as the *medias* prescribed further on were to have no such square borders. The weight of 205 to the mark for *blancas* and 410 for *medias* makes it clear that the coins found at La Isabela, weighing about one gram are indeed the *blancas* and not *medias* of the ordinance.

²⁴ Dasi (above, n. 17), no. 3, pp. iii-iv.

²⁵ *Cortes* (above, n. 15), vol. 3, no. 22, p. 693, c. 19.

agreed to try to remedy the situation. However, things appear to have gotten worse. In 1469, the procurators complained that the number of mints had grown from the traditional six cities of Burgos, Toledo, Seville, Cuenca, Coruña, and Segovia as a result of recent royal minting grants.²⁶ In the Toledo ordinance of 1471, Henry admitted having allowed minting in other cities to the detriment of the populace; he revoked all such charters and restricted the minting back to the six traditional mints.²⁷ His success in establishing the new coin and driving all of the earlier issues from circulation is illustrated by the predominance of the issue at La Isabela. The blanca of this 1471 issue appears to have been the only low denomination Castilian coin in common circulation 20 years later.²⁸

Blancas of the six traditional mints are all represented in the finds from La Isabela. Seville, mint mark S, predominates with 16 examples (30–45); this is to be expected from its proximity to the departure points of the fleets. The nine coins of Toledo, T (46–54), five of Segovia, aqueduct symbol (25–29), five of Cuenca, cup (18–22), two of Coruña, C (23–24), and one of Burgos, B (17) are about what one would anticipate from the geography and monetary importance of these mints.

The 13 coins with mint mark A (4–16) are harder to understand; no such mint is admitted in the ordinance of 1471, which not only names the mints but specifies their marks. The explanation is to be found in a document recently discovered and published by Anna M. Balaguer.²⁹ In

²⁶ Cortes (above, n. 15), vol. 3, no. 25, pp. 805–6, c. 24.

²⁷ Cortes (above, n. 15), vol. 3, no. 26, pp. 830–31, c. 59. A later chronicle claimed (probably with exaggeration) that the number of mints had risen to 150: quoted in Manuel Gil y Flores, "Marcas de taller ó zeca de las monedas hispano-cristianas," *Revista de Archivos, Bibliotecas y Museos* 1 (1897), pp. 382–83.

²⁸ Few excavations in Spain have published finds of coins of the period for comparison. In the excavations of the medieval graves at Tiermes (Soria), eleventh to fifteenth century, the reform blanca accounts for two of the nine billon specimens from the reign of Henry IV: Carlos de la Casa Martínez, "Moneda medieval hispano-cristiana en Tiermes," *Gaceta Numismática* 74–75 (1984), pp. 187–89. A hoard of the issue found in Osma had about 100 blancas of Henry IV of this issue (assigned to Henry III following Heiss's attribution), mostly of Burgos, but containing also four coins of Segovia and three of Avila: Felipe Mateu y Llopis, "Hallazgos monetarios (V)," *Ampurias* 9–10 (1947–48), no. 316, p. 83.

²⁹ Anna M. Balaguer, "Carta de concesión de los derechos de la casa de moneda de Avila a la princesa Isabel (1468)," *Numisma* 28 (1978), pp. 519–29.

1468, Henry IV granted his sister Isabella the right to the mint of Avila, authorizing her to make coins of gold, silver, and billon there. He specified that should he in the future revoke the grants of privileges to other mints, the mint of Avila would be exempt from such revocation and could operate whenever the mints of Burgos, Toledo, and Seville did. This exception to the revocation of minting rights for Avila seems to have been honored only in the case of the reform blancas, which appear to have been made in significant numbers.³⁰ It is possible that the mint continued to coin billon in the name of Henry after his death and the accession of Isabella to the Castilian throne.

The importance of the blanca as the basic low denomination coin of the era of Columbus is reinforced by the finding of an example at the Long Bay site on San Salvador Island, Bahamas, in a context which included other European artifacts.³¹ Other sites have been identified with the San Salvador of Columbus's first land fall in 1492, but the discovery of this coin, of the predominant issue found at La Isabela, strengthens the claim of the Bahamas site as the location of the first encounter between Columbus and natives of the New World. The blanca found at San Salvador was analyzed by electron microprobe analysis and found to have 3.97% silver; a control analysis of ten other specimens of the issue yielded results ranging from 2.51% to 4.71% silver, in line with the 3.5% prescribed in the 1471 ordinance.

The other coin issue found in significant quantities at La Isabela is the Portuguese ceutil, of which five examples are from the reign of Alfonso V, 1432–81 (67–71) and one of John II, 1481–95 (72). Their presence may relate to the origins of some of the settlers or may simply be a result of their common use in the Iberian peninsula. The predominance of the earlier issue over the one more contemporary with Columbus's era echoes the relative commonness of the ceutils of Alfonso V

³⁰ Anna M. Balaguer, "La disgregación del monedaje en las crisis castellana del siglo xv. Enrique IV y la ceca de Avila según los documentos del Archivo de Simancas," *Acta Numismática* 9 (1979), pp. 171–72. On none of the coins from La Isabela can one make out an uncrowned P to the left of the castle which appears on some coins with the A below the castle described by Balaguer.

³¹ Robert H. Brill et al., "Laboratory Studies of Some European Artifacts Excavated on San Salvador Island," *First San Salvador Conference: Columbus and His World*, ed. Donald T. Gerace (San Salvador, Bahamas, 1986), pp. 255–57.

and rarity of those of his successor.³² The finding of a few examples of other issues illustrates the heterogeneous monetary circulation of medieval Europe. The bent and broken anonymous billon coin of Castile (65) is now assigned to the reign of Alfonso X, 1252–84.³³ The survival of a coin in circulation for two centuries is not an unusual phenomenon for this period.³⁴ The coin of Navarre (66) and the two of Italian mints (73 and 74) are representative of the common “black money” of the fifteenth century which circulated widely in the Mediterranean.

The coins found at La Isabela offer a picture of the low denomination coinage in Castile-Leon in the last decade of the fifteenth century, a narrowly focused image which is without parallel in Spain itself. The numismatic finds confirm the identity of the site with that known from documentary sources and support the conclusion that it was virtually abandoned by the end of the decade. In a complementary fashion, the lack of billon coins in the name of Ferdinand and Isabella on this site confirms the inference that such coins were not issued until the reforms of 1497. Later sites from the New World were dominated by the reformed coinage, which was to stand as the basis for many modern monetary developments, including the American dollar. The coin finds at La Isabela represent a brief episode of medieval European coinage in the New World.

CATALOGUE

REFERENCES

Amaral C. M. Almeida do Amaral, *Catálogo descritivo das moedas Portuguesas, Museu Numismático Português*, vol. 1 (Lisbon, 1977)

³² The numbers of specimens in the Lisbon Casa de Moeda collection of each issue is indicative of their relative rarity: 170 of Alfonso V against 14 of John II: C. M. Almeida do Amaral, *Catálogo descritivo das moedas Portuguesas, Museu Numismático Português*, vol. 1 (Lisbon, 1977), pp. 339–58 and 392–94; see also the rarity ratings and collector values given in Pedro Batalha Reis, *Preçário das moedas portuguesas de 1140 a 1640* (Lisbon, 1956).

³³ James J. Todesca, “The Monetary History of Castile-Leon (ca. 1100–1300) in Light of the Bourgey Hoard,” *ANSMN* 33 (1988), p. 198.

³⁴ For example, the three thirteenth-century coins in the Chalkis hoard, buried after 1462: Alan M. Stahl, *The Venetian Tornese, a Medieval Colonial Coinage*, *ANSNM* 163 (1985), pp. 79–80.

CC Juan R. Cayón and C. Castán, *Monedas Españolas* (Madrid, 1991).

CNI *Corpus Nummorum Italicorum*, 20 vols. (Rome, 1910–70).

Heiss Aloiss Heiss, *Descripción general de las monedas hispano-cristianas*, 3 vols. (1865–69, rpt. Saragossa, 1962).

Each individual entry contains the weight in grams, followed by the die axis in hours, the field specimen number, and any particular observations.

SPAIN

Castile and Leon

HENRY IV, 1454–74

Silver real, 1471–74: Heiss 20; CC 1526

Burgos

1. 3.2, 10, 1996

Silver half real, 1454–71: CC 1541

Cuenca

2. 1.5, 11, 198, broken

Silver half real, 1471–74: Heiss 21, CC 1537–39

Uncertain mint

3. 1.1, 1, 782, fragment

Billon blanca, 1471–74: CC 1620–29

Avila

4. 1.0, 1, 201
5. 1.0, 1, 1749
6. 1.0, 9, 2105
7. 0.9, 3, 450
8. 0.8, 10, 173
9. 0.7, 9, "found east of Columbus's house"
10. 0.7, 7, 792
11. 0.6, 4, 32
12. 0.6, 1, 235
13. 0.4, 1, 173

Avila ?

- 14. 0.8, 2, 173
- 15. 0.8, 7, 3541
- 16. 0.4, ?, 155

Burgos

- 17. 0.3, 3, 2821

Cuenca

- 18. 1.0, 11, 530
- 19. 1.0, 12, 155
- 20. 0.6, 12, 40
- 21. 0.6, 5, 198
- 22. 0.5, ?, 663

Coruña

- 23. 1.0, 2?, 41
- 24. 0.8, 3, 117

Segovia

- 25. 1.1, 12, 3126
- 26. 1.0, 4, 5189
- 27. 0.9, 9, 155, obv. triangular counterstamp; rev. two small holes
- 28. 0.8, 6, 528
- 29. 0.7, 6, 3126, rev. four triangular counterstamps

Seville

- 30. 1.1, 6, 3596
- 31. 1.0, 11, 2277
- 32. 0.9, 1, 155
- 33. 0.8, 10, 3338
- 34. 0.8, 7, 197
- 35. 0.8, 12, 1923
- 36. 0.7, 1, 2420, bent
- 37. 0.7, 12, 202
- 38. 0.7, 12, 173
- 39. 0.6, 3, 1991
- 40. 0.6, 11, 2335
- 41. 0.6, 2, 1978
- 42. 0.6, ?, 620
- 43. 0.5, 3, 2351
- 44. 0.5, 5, 3597

Seville ?

45. 0.6, 2, 2952

Toledo

46. 1.3, 9, 1970

47. 1.2, 12, 202

48. 1.0, 6, 2130

49. 0.9, 10, 235

50. 0.9, ?, 5240

51. 0.8, 2, 5376

52. 0.6, 2, 1980

53. 0.7, 10, 3245

54. 0.5, 6, 528

Uncertain mint

55. 0.9, 6, 32

56. 0.9, ?, 1939

57. 0.7, ?, 39, in two pieces before cleaning, three pieces after

58. 0.7, 7, 112, broken in cleaning

59. 0.6, ?, 1958, rotated double-strike

60. 0.6, ?, 256

61. 0.5, 4, 783

62. 0.4, 4, 5240

63. 0.2, ?, 1761

FERDINAND AND ISABELLA, 1474–1504

Silver half real, 1475–97, Heiss 11, CC 2505

Toledo

64. 1.6, 4, 3502

ANONYMOUS

Billon seisén, late thirteenth century, Heiss, pl. 6, 4–10; CC 1165–74.

Uncertain mint

65. 0.3, ?, 1044

Navarre

CATHERINE I AND JOHN II D'ALBRET, 1483–1512

Billon half blanca, Heiss 8, CC 2122

66. 0.8 ?, 2778

PORTUGAL

ALFONSO V, 1432–81

Billon ceitil, Amaral 1041–1211

- 67. 2.1, 3, 173
- 68. 1.9, 3, 117
- 69. 1.7, 9, 530
- 70. 1.6, 11, 530
- 71. 1.4, 7, “found in El Poblado”

JOHN II, 1481–95

Billon ceitil, Amaral 1297–1311

- 72. 1.9, 3, 778

ITALY

Aquileia

LOUIS II OF TECK, 1412–37

Soldo, *CNI* VI.III.28

- 73. 0.3, 8, 2091

Genoa

UNCERTAIN FIFTEENTH CENTURY DOGE

Minuto, cf. *CNI* III.V.7 and VII.10

- 74. 0.4, ?, 3324

UNIDENTIFIED

- 75. 0.1, 2613, fragment, possible inscriptions: ANA and REX
- 76. 0.5, 1970
- 77. 0.4, 2498
- 78. 0.2, 1753

TABLE OF COINS FOUND AT LA ISABELA, S.D.

Castile and Leon

Henry IV, 1454-74

Real	1
Half real	2
Blanca	60
Avila	13
Burgos	1
Cuenca	5
Coruña	2
Segovia	5
Seville	16
Toledo	9
Uncertain mint	9

Ferdinand and Isabella, 1474-1505

Half real	1
-----------	---

Anonymous Late XIII Century

Seisén	1
--------	---

Navarre

Catherine I and John II d'Albret

Half blanca	1
-------------	---

Portugal

Alfonso V, 1432-81

Ceítal	5
--------	---

John II, 1481-95

Ceítal	1
--------	---

Aquileia

Louis II of Teck, 1412-37

Soldo

1

Genoa

Fifteenth Century

Minuto

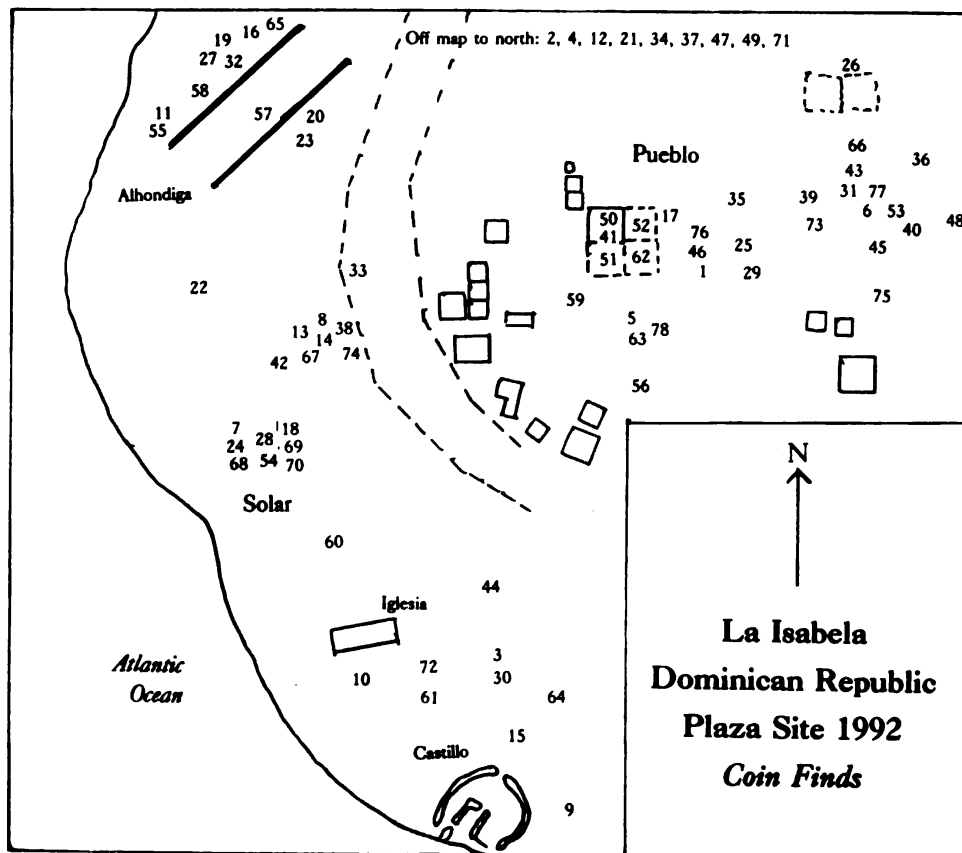
1

Unidentified

4

Total

78



A SEVENTEENTH CENTURY CALENDAR SCALE FOR COINS AND MATHEMATICAL INSTRUMENTS

(PLATES 26-27)

A. J. TURNER

WITH A CHECKLIST OF COIN-CALENDARS IN THE
MUSEUM OF THE HISTORY OF SCIENCE, OXFORD

Coin-calendars are small disks of metal, usually silver or copper, which carry calendrical information on each face. They may be either perpetual or restricted to use in a single year. Most surviving specimens are English although French and Dutch examples are also known.¹

¹ A French calendar for 1779 is in the National Maritime Museum, Greenwich (A. J. Turner, "Calendars and Perpetual Calendars" in *An Inventory of the Navigation and Astronomy Collections in the National Maritime Museum*, 3 vols. [Greenwich, 1971], 29:60). There is another of the same date in the Museum of the History of Science, Oxford, a third in the Musée du Temps, Besançon (P. Mesnage, *Musées de Besançon: Collection d'Horlogerie* [Besançon, 1955], 119), and a fourth in the collection of the American Numismatic Society, 1962.2.9. A Dutch example, which is for 1767 and signed "Visser Fecit," is in the author's possession as is another French example dated 1777. A Flemish calendar medal signed "P. D. Blauwe Mer at Gents" for 1777 is in the British Museum. See F. A. B. Ward, *A Catalogue of European Scientific Instruments in the Department of Medieval and Later Antiquities of the British Museum* (London, 1981), p. 133, no. 417. All these are single year calendars.

The objects discussed in this article are usually referred to as calendar medals, but the author prefers the term coin-calendar. "The reason for this is that Samuel Morland is quite explicit about the connection with money and clearly conceived the device with coins rather than medals in mind. Moreover all surviving coin-calendars are the size of coins and like them usually much worn, rather than conforming to the often larger sizes and generally good condition of medals....[The term calendar medal] imports I think connotations which [are] quite alien to the nature of coin-calendars and the way in which they were used."

Coin-calendars of the perpetual type (Plate 26, 1) carry a month scale which can be found both on coin-calendars and inscribed on mathematical instruments such as quadrants and magnetic azimuth dials.² The top two rows of the scale contain numbers representing the months of the year. The remaining rows carry the days of the month (Plate 26, 1 obverse). The month numbers may be arranged in several ways which supply the basis for a classification. There are five main patterns and four variants.

I	2	7	4	12	6	3	11
				1			
	5	10	0	9	0	0	8
Ia	As I, except 5 in top line and 2 in bottom						
Ib	As I but 11 and 8 inverted and placed in the first column						
II	2	7	4	9	6	3	0
	5	10	12	1	0	11	8
III	1	6	3	8	5	7	12
	9	0	11	0	2	10	4
IIIa	9	0	11	0	2	10	12
	1	6	3	8	5	7	4
IV	6	3	11	5	7	4	1
			8	2	10		12
IVa	5	7	4	1	9	6	3
	2	10			12		11
V	1	4	9		11		
				6	2	8	5
	10	7	12		3		

² For calendars on quadrants, see below. For magnetic azimuth dials, see S. A. Lloyd, *Ivory Diptych Sundials 1570–1750* (Cambridge, Mass. & London, 1992), pp. 19–23, 116–34, and the introductory remarks by A. J. Turner, pp. 101–3.

To use the calendar it is necessary to know the dominical letter—that is a letter between A and G which represents the first Sunday in the year.³ The numerical value of the dominical letter, taken from its position in the alphabet (e.g., F=6), is added to the number in the first row of the day scale in the column of the month required. The result is the date of the first Sunday in the month, and other days and dates may then be worked out in sequence. Thus to find the first Sunday in July 1675 using the perpetual calendar shown in Plate 26, 1, the dominical letter for 1675 in the Julian calendar is C, and July is the fifth month since the year begins on 1 March. The number 5 occurs in the first column of the diagram and the first day number below is 1. The numerical equivalent of the dominical letter C is 3, whence $1 + 3 = 4$, which is the date of the first Sunday in July 1675 Old Style.⁴

In England at least where it was most popular, both the idea of the coin-calendar and the arrangement of scales to fit it appear to have originated with Samuel Morland (1625–95). Morland, a diplomat and engineer, was created a baronet in 1660. Best known for his invention of calculating machines and for his successful work in hydraulics,⁵ he

³ The letter A denotes January 1 of the year, B denotes January 2, and so forth through G which denotes January 7. The A to G notation repeats in the second week and so on through the year. The year of 365 days equals 52 weeks and 1 day, so normally January 1, denoted by A, advances 1 day each subsequent year. In a leap year, with the extra day, A (January 1) advances 2 days in the subsequent year. For further explanation of year letters and dominical letters, see J. J. Bond, *Handybook of Rules and Tables for Verifying Dates with the Christian Era* . . . , 4th ed. (London, 1889), pp. 26–33.

⁴ A brief explanation of the functioning of the calendars is also given by P. Dabin, *Le Rayon noir, le temps à l'heure angevine* (Longué, 1979), pp. 116–18. The earliest modern notice of calendar-coins seems to be that by A. W. Oxford in his *Notes from a Collector's Catalogue: with a Bibliography of English Cookery Books* (London, 1909).

⁵ For his life and work in general, see H. W. Dickinson, *Sir Samuel Morland, Diplomat and Inventor 1625–1695*, ed. by Arthur Stowers and Rodney J. Law, Newcomen Society, Extra Publication 6 (Cambridge, 1970) and J. O. Halliwell, *Brief Account of the Life, Writings, and Inventions of Sir Samuel Morland, Master of Mechanics to Charles the Second* (Cambridge, 1838). For his work on the barometer, see W. E. Knowles Middleton, *The History of the Barometer* (Baltimore, 1964), pp. 99–102 and 110, and D. J. Bryden, "Sir Samuel Morland's Account of the Balance Barometer 1678," *Annals of Science* 32 (1975), pp. 359–65. Both these latter works give several further references.

issued a pocket calendar in 1650 both printed on paper and as a coin. Subsequently he enlarged the calendar tables, added other information, and appended the whole to a description of his calculating machines published in 1673.⁶ Of the calendar Morland remarked, "This Almanack was first intended to be as short and compendious as was possible and to be graven on a small plate of Silver, about the breadth of a shilling, and so portable together with money."⁷ A surviving example of Morland's calendar coin is rather larger than a shilling (or at least what used to be a modern shilling), being closer to the size of a half crown.⁸ It is engraved on the obverse with a perpetual calendar for finding the day of the month, and on the reverse with a table for finding the dominical letter (Plate 26, 2).

In 1653, Edward Mathews of Sidney Sussex College, Cambridge, sent an example (or perhaps a sketch) of a silver perpetual almanac to an unnamed friend or pupil.⁹ From then on they seem to have become increasingly common. Certainly from the last quarter of the seventeenth century several examples in pewter, silver, or copper have survived. Of these the earliest are signed W. Foster and date from 1684/5 onward (Plate 26, 1). Other examples in the early eighteenth century are signed A. Buckley, Thomas Cole, and John Weet. That these examples were derived directly from Morland seems not unlikely, since the

⁶ S. Morland, *The Description and Use of Two Arithmetick Instruments Together with a Short Treatise, Explaining and Demonstrating the Ordinary Operations of Arithmetick. And Likewise a Perpetual Almanack and Several Useful Tables* (London, 1673). The section dealing with the almanac is separately signed and paginated. Although it does not have a separate title page in the copies examined, it may possibly have been issued separately. Robert Hooke, for example, noted in his diary for 17 January 1672/3, "brought Keplers *Dioptricks* and Morland *Almanack* 20d" without reference to the *Arithmetical Instruments* (H. W. Robinson and Walter Adams, eds., *The Diary of Robert Hooke . . . 1672-80* [London, 1935; rpt. 1968], p. 22). Morland's pocket calendar, engraved and printed on one side of the page only, is included in the book and although part of a signature (A5v), is not paginated, perhaps implying that it was intended to be removed for use.

⁷ Morland (above, n. 6), sig. A2r.

⁸ British Museum, London: Department of Medieval and Later Antiquities Inv. 91, 2-17.8 presented by Sir Arthur Franks in 1891. Of 41 mm diameter, it is inscribed in Roman majuscule "A Perpetual Almanack Invented by S. Morland 1650," Ward (above, n. 1), p. 129, 371.

⁹ R. T. Gunther, *Early Science in Cambridge* (Oxford, 1937), p. 192, 208.

only difference between them is the indication of the months: Morland used their initial letters, while the later examples used the numbers 1–12 and different combinations of the months as set out above. The principle, however, is the same, and apart from Morland's own, no dated calendar medals have yet been found which predate his book of 1672/3. The calendar diagram had however been disseminated earlier, for Henry Sutton used it on several of the instruments that he made. The engraved copper plate from which Gunter quadrants were printed in 1658 carries the diagram arranged vertically, not horizontally, with a root year of 1656 (Plate 27, 3), and a brass Gunter quadrant of this date also has the diagram.¹⁰ On a sundial of 1660 Sutton used the diagram horizontally but represented the months by their astrological symbols.¹¹ Since there was contact between Sutton and Morland, Sutton being the maker of two examples of Morland's calculating machines,¹² Sutton's use of the perpetual calendar is probably not an independent development. More difficult to explain is the appearance of the calendar in an unpublished treatise on arithmetic by Richard Cartwright in 1661, concerning whom nothing else is known.¹³

When it was published, Morland's calendar scale also seems to have stimulated interest. In his manuscript notebooks of calendrical material, Seth Ward (1617–89), Bishop of Salisbury and a noted mathematician, wrote out a perpetual calendar of this form with 1672/3 as the root year.¹⁴ In 1676 Anne Shepherd of Bristol signed an ivory Gunter's quadrant which included on the back a perpetual almanac arranged

¹⁰ For an example of the 1658 quadrant, see A. J. Turner, *Astrolabes and Astrolabe Related Instruments* (Rockford, 1985), pp. 226–28, 33. The 1656 quadrant is in the Science Museum, London, Inv. 1888–49.

¹¹ Present location not known, illustrated in H. Michel, *Traité de l'Astrolabe* (Paris, 1948; rpt. 1976, p. 129).

¹² Now in the Museo di Storia della Scienza, Florence and the Science Museum, London.

¹³ R. Cartwright, "The Well-Spring of Sciences, Which Teacheth the Use and Practice of Arithmetick Necessary for Ech (*sic*) Person Belonging to Art or Trade," 1661, 8° manuscript in a private collection. Beneath the calendar diagram is the name of "Iohn Adams," which has been scratched out. The almanac was perhaps written by another hand (query that of John Adams), but there is nothing to indicate whether at the same time as the rest of the manuscript or later.

¹⁴ Ms Commonplace notebook, Salisbury Diocesan Record Office.

almost exactly as Morland's printed example. Another surviving Gunter quadrant of ca. 1677, apparently made by an amateur of mathematics and engraving, carries an almost identical calendar.¹⁵ John Playford used Morland's calendrical material for the almanac part of his *Vade mecum*. . . , 1679,¹⁶ and in the same year it was engraved on a silver vertical dial by J. Mann.¹⁷ The scale was used both in full and contracted form on the type of Gunter quadrant made by John Brown.¹⁸ Browne was associated with Sutton, publishing two books jointly with him,¹⁹ and thus can be assumed to have obtained his knowledge of the scale from him or through him directly from Morland. A further example of the scale is known, engraved on the case of a watch,²⁰ and in 1694 Joseph Selden included the scale in his manual for merchants.²¹

Use of Morland's scale was not confined to England. In France the perpetual calendar, although usually with a different arrangement of the month lines, was often added to magnetic azimuth dials of the type associated with Charles Bloud and the ivory dial makers of Dieppe (Plate 26, 4).²² In the Netherlands the scale appears with exactly the

¹⁵ The quadrant by Anne Shepherd is now in the National Maritime Museum, Greenwich, inventory Q9. See A. Stimson, "Quadrants (Hand-Held)," in *Inventory* (above, n. 1), 26:5. The ca. 1677 quadrant, which is of brass, is illustrated in H. Wynter and A. Turner, *Scientific Instruments* (London, 1975), p. 25, fig. 18.

¹⁶ Playford's publication reached its twenty-second edition in 1772, when it still used Morland's calendrical material, although by then adopted to the Gregorian calendar.

¹⁷ In a private collection, Paris. Illustrated in A. Turner, *Early Scientific Instruments: Europe 1400-1800* (London, 1987), p. 175, fig. 179.

¹⁸ See Turner (above, n. 10), 32, although the date there ascribed to the instrument may need revision in the light of what has been written above. If it is accepted that Browne's quadrant cannot predate Morland's calendar, then one should perhaps consider the date around which the leap years are symmetrical, viz 1656, as the most likely date for the instrument. Alternately, if a pre-1650 date is accepted for the instrument one would have to assume that Browne was in contact with Morland and used his scale before Morland himself. This, though possible, seems unlikely.

¹⁹ Turner (above, n. 10), p. 225.

²⁰ P. W. Cumhaill, *Investing in Clocks and Watches* (London, 1967), p. 19.

²¹ S. Selden, *The Tradesman's Help. An Introduction to Arithmetick Both Vulgar, Decimal and Instrumental; with the Use of a New Instrument called the Jointed Sliding Rule, and Also a Perpetual Almanack Shewing the Day of the Month, Change of the Moon &c. With Directions for the Making of Bonds, Wills, and Other Things of Note* (London, 1694), p. 10.

²² Several examples are shown in Lloyd (above, n. 2).

same month line arrangement as Morland's on the tobacco boxes invented for sailors by Pieter Holm. Examples of these survive with dates ranging from 1720 to 1817.²³ Whether the calendrical scale was transmitted from Morland's original in England or independently devised in France or the Low countries is, however, unknown. Perhaps the former is more likely for in 1690, when the recently deposed James II of England visited the Académie Royale des Sciences at Paris, conversation about Morland's water-raising machinery led James to show "two discs of silver in the form of medals, one of which enabled one to find for several centuries the day of the week for any day of the year proposed according to the Julian calendar, the other according to the Gregorian calendar."²⁴

This passage is interesting for its information that Morland had produced both Gregorian and Julian versions of his calendar. Furthermore, the academicians might not have bothered to record the conversation had they been familiar with calendar medals. The scale they used was, however, by this time certainly known in France. Apart from its wide use on Dieppe made, magnetic azimuth dials, the scale had been published and explained a few years earlier by George de Bocage.²⁵ In both England and France, therefore, we may consider that the scale was

²³ For tobacco boxes in general, see J. Russell, "A Group of Metal Tobacco Boxes in the Collections of the British Museum," *Post-Medieval Archaeology* 13 (1979), pp. 211–26; M. Wiswe, *Hausrat aus Kupfer und Messing* (Munich, 1979), pp. 126–37. For Pieter Holm, see E. Crone, "Pieter Holm and His Tobacco Box"; *Mystic Historical Association* 24 (April 1953), pp. 7–21 (English translation by Dirck Brouwer of Ernst Crone, "Pieter Holm en zyn tabaksdoos," *De Zee* (1928–29); and Ernst Crone, "Pieter Holm en zijn Octant," *De Zee* (1941).

²⁴ "A l'occasion des Machines du Chevalier Morland, S. M. fit voir deux plaques d'argent en forme de médaille, dont une servoit pour trouver pendant plusieurs siecles à chaque jour d'une année proposée le jour de la semaine, selon le Calendrier Julien, l'autre suivant le Calendrier Gregorien; mais elle dit que cette dernière était fautive, & ne pouvait servir que jusqu'à la fin de ce siecle parce qu'on n'avoit pas pris garde au jour qu'il faut ôter à l'année." *Histoire de l'Académie des Sciences depuis son établissement en 1666 jusqu'à . . . son renouvellement en 1699*, 2 vols. (Paris, 1733), p. 103. An original draft of this description of James's visit to the observatory with corrections by Cassini is now Observatoire de Paris ms D.1 (13).

²⁵ G. de Boissaye de Bocage, *Cercle universel*. . . (Le Havre, 1683), pp. 115–16, description of a calendar "pour trouver par quel jour de la semaine commence chaque mois."

sufficiently known to those who wished to use it. There are examples of it even into the nineteenth century but, in general, use of the device dies away in the course of the eighteenth century, when, from the middle decades onward, calendar medals for single years made in England by Birmingham button manufacturers predominate (Plate 27, 5).

Two makers in particular are preeminent in the making of single year calendars, John Powell (*fl.* 1746–81), working at Powell's Yard, Spiceal (Spiceall) and Spicer Street, between 1761 and 1781,²⁶ and James Davies (*fl.* 1777–1801). Many example of both their productions which are successive, have survived.²⁷ Davies' series of calendars follows that of Powell and so far no overlap of dates has been found on surviving examples. Normally produced in copper, but occasionally in a white metal alloy, in the course of the nineteenth century such pieces gradually lost much of the calendrical information they had previously carried in the interests of finding space for an advertising message from the businesses that now distributed them.

APPENDIX: CALENDAR MEDALS IN THE MUSEUM OF THE HISTORY OF SCIENCE, OXFORD

A. *Perpetual Calendar Medals*

1. Easter 1684	Not signed	Type I	Inscribed "A Perpetual Almanack of Excellent Ready Use"
2. Easter 1685	W. Foster	Type II	
3. Easter 1685	W. Foster	Type II	
4. Date broken	W. Foster	Type III	Instructions for use on reverse

²⁶ *Sketchley's Birmingham, Wolverhampton, and Walsall Directory*, 1767; *Swinney's New Birmingham Directory*, 1774; *Pearson & Rollason's Birmingham, Wolverhampton, Walsall, Dudley, Bilston and Willenhall Directory*, 1781. The earliest known coin-calendar signed by Powell is one for 1746 in the collection of the American Numismatic Society.

²⁷ Representative selections may be seen in the Museum of the History of Science, Oxford; the British Museum, London; the National Maritime Museum, Greenwich; and the American Numismatic Society, New York.

5. Easter 1716	Buckley ²⁸	Type IIIa	
6. Easter 1716?	Name erased	Type IIIa	
7. Easter 1718	A. Buckley	Type IIIa	
8. Easter 1725	Tho Cole	Type IIIa	
9. Easter 1728	John Weet	Type IIIa	
10. Easter 1728.	Not signed	Type II	Design on reverse and dates for every 28 years from 1728
11. Easter 1735	Tho Cole	Type IIIa	
12. No date	Not signed	Type III	
13. No date	Not signed	Type IV	

B. *Single Year Calendars*

Each disc carries on the obverse a table of Sunday figures for the year and on the reverse a table of dates for new and full moons. In addition all carry dates of the law terms, Easter, and Whitsun. The three earliest, Powell 1 and 2 and Turner, have only this information, while the rest carry far more, including birth dates of the king, queen (sometimes), and the prince of Wales: accession of the king; dates of Lent, Holy Thursday, Good Friday, Septuagint, and Advent; number of the solar cycle; golden number; dominical letter; and the epact. From 1806 onwards, Kempson replaced royal birthdates with the dates of eclipses.

1. 1745	T. Turner	1	Old style. Law terms, Easter, and Whitsun dates only, two examples
2. 1751	John Powell Birmingham	1	Old style
3. 1753	John Powell	2	
4. 1755	John Powell	3	New style. Wider range of calendrical information
5. 1761	John Powell	4	
6. 1765	John Powell	5	Reduction in size
7. 1767	John Powell	6	Improved layout
8. 1769	John Powell	7	
9. 1770	John Powell	8	

²⁸ Buckley's name was probably Andrew, following a calendar now in the British Museum for 1717, Ward (above, n. 1), p. 131, 386.

10.	1772	John Powell	9	
11.	1775	John Powell	10	Queen's birthday added
12.	1776	John Powell	11	
13.	1779	John Powell	12	
14.	1770	Not signed	1	French, same information plus dates of the seasons
15.	1780	John Powell	13	
16.	1781	John Powell	14	
17.	1782	W & W	1	
		Birmingham		
18.	1783	James Davies	1	Contains all the above information
		Birmingham		
19.	1784	James Davies	2	Leap year
20.	1785	James Davies	3	
21.	1791	James Davies	4	
22.	1793	James Davies	5	
23.	1794	James Davies	6	Leap year
24.	1795	James Davies	7	
25.	1797	James Davies	8	
26.	1797	P. Kempson ²⁹	1	All information, different layout
		Birmingham		
27.	1798	P. Kempson	2	
28.	1803	Kempson &	1	
		Kinder		
29.	1804	P. Kempson	3	
30.	1805	P. Kempson	4	
31.	1806	P. Kempson	5	Royal birthdays replaced by eclipse dates
32.	1807	P. Kempson	6	
33.	1808	P. Kempson	7	
34.	1809	P. Kempson	8	
35.	1814	Kempson &	1	Adds date of Palm Sunday
		Son		

²⁹ For whom, see L. Forrer, *Biographical Dictionary of Medallists*, 8 vols. (London, 1904-30), vol. 3, p. 19.

- | | | | | |
|-----|------|------------------------------|---|--|
| 36. | 1821 | Kempson & Son | 2 | |
| 37. | 1822 | J. W. | 1 | Medal. Obverse bust of Sir Isaac Newton with dates of the law terms circularly around it. Reverse has Sunday figures, no table of Moons. |
| 38. | 1823 | Kempson & Son | 3 | |
| 39. | 1827 | Halliday fecit ³⁰ | | New and full moons set out circularly, not tabulated, with various ecclesiastical dates enclosing the head of George IV |
| 40. | | Not signed | | As 39, except with head of William IV |

C. *Advertisement Calendars*

The obverse carries an advertisement for the distributor. The reverse has a calendar for the year without any other information.

- | | | | |
|----|------|--|--|
| 1. | 1895 | The North's. England's typewriter | R. E. Daish, Edinburgh, maker. Dessau's copyright calendar on reverse. |
| 2. | 1895 | Toddy & Co's Myrtle Grove tobacco and cigarettes | Aluminium, circular calendar for the year in seven divisions |
| 3. | 1895 | Carter's Little Liver Pills | Aluminium. As 2 |
| 4. | 1897 | Bruxelles Exposition | Aluminium. Similar to 1 and 2 |

This list contains examples of medals by most of the known makers. The following names may be added from other sources: Charles Twigg, Birmingham, 1794–95 and 1798; T. W(ells) Ingram, 131 Snow Hill, Birmingham, 182;³¹ I. Simons, 1716; James Silvester, Birmingham, 1758; D. Silk, astronomer, 1758;³² Pasier (?), 1718; and I. Glover, 1742.³³

³⁰ Forrer (above, n. 29), vol. 2.

³¹ Both mentioned by Oxford (above, n. 4). Calendars by them are in the American Numismatic Society, New York.

³² Examples by these last three makers are preserved in the National Maritime Museum, Greenwich. See Turner (above, n. 1).

³³ Examples by these two makers are in the American Numismatic Society, New York.

BOOK REVIEWS

ANCIENT

MARTIN J. PRICE, *The Coinage in the Name of Alexander the Great and Philip Arrhidaeus*, a British Museum catalogue. Zurich and London: the Swiss Numismatic Society in association with the British Museum Press, 1991. 2 vols., 637 pp., 159 pl. ISBN 3-908103-00-2.

Price's catalogue represents an enormous achievement. Not since Ludwig Mueller's pioneer work of 1855 (*Numismatique d'Alexandre le Grand, suivie d'un appendice contenant les monnaies de Philippe II et III*) has any single publication attempted to list all known varieties of gold, silver, and bronze coins minted in the name of Alexander the Great and Philip Arrhidaeus (Philip III). The reason is simple enough: the number of known varieties runs into the thousands (Price's list includes more than 4,070 different varieties) and not only are there many extremely vexing questions surrounding the attribution, sequence of issue, and absolute chronology, but examples of previously unknown varieties minted during the more than 250 years of lifetime and posthumous production also appear continuously. As a result, gathering the material for a comprehensive catalogue is an extremely laborious and time consuming challenge. Price's account and listing of varieties took more than 20 years to assemble and, while including gold, silver, and bronze types minted by Alexander's own authority or posthumously in his name, and in the name of Philip III his immediate successor, and in the name of Lysimachus, it somewhat inconsistently excludes all varieties of Alexander types minted in the individual names of other authorities, such as issues in the name of Antigonus Monophthalmos, Demetrius Poliorcetes, Seleucus I, and others. But despite that exclusionary distinction, Price identifies nearly 110 mints and more than doubles the number of varieties published by Mueller.

The organization of the catalogue aims at achieving two distinct goals: first, to provide the most comprehensive list possible of all known varieties from whatever source arranged according to mint attribution and date of issue, and second, to publish the individual collection of the British Museum. The result is a far more useful catalogue than would have been produced if either the now outdated form of a *Catalogue of the British Museum* or the completely illustrated but far from comprehensive format of the *Sylloge Nummorum Graecorum* had been adopted. Instead, Price simultaneously presents both the comprehensive whole and the Museum's representative part. First, he lists all known varieties of a series or period from a particular mint and then, separately, with full details, the examples of that particular grouping found in the British Museum collection. And while the British Museum may not have the overall depth of Alexanders as the American Numismatic Society in New York has, due especially to the benefaction of Edward T. Newell, or perhaps the Bibliothèque National in Paris, thanks to Henry Seyrig, nevertheless, the diversity of examples in the British Museum collection is quite remarkable and allows Price to illustrate the catalogue with 2,723 examples on 159 plates, nearly all of which are drawn from the holdings in London.

Perhaps the most impressive feature of the catalogue is the indexing. Ever since Mueller's publication scholars, curators, and numismatic dealers alike have normally cited the 1855 catalogue when identifying individual varieties of the Alexander types, and this practice can be seriously misleading due to the numerous attribution errors in Mueller. For instance, to cite just two examples taken at random from recent sale catalogues, the *Numismatica Classica* List 5, 1980, 536, illustrates an Alexander tetradrachm identified as Mueller 216 attributed to Dium in the Pieria district of southwestern Macedonia (Plate 28, 1), and 538 from the same catalogue is listed as a "posthumous" tetradrachm, Mueller 727, coming from the united mints of Macedonia, Thrace, and Thessaly (Plate 28, 2). When, however, the same examples are located in Price, 536 fits into the issues of southwestern Asia Minor, perhaps from Side (Price, 2948a–b), assigned to ca. 325–320 B.C., and 538 falls into the sequence from Babylon (Price, 3722–23) dated between the years 317–311. This is typical. Almost any sale catalogue published prior to Price will have Mueller attributions that are inaccurate. Even if Price's exact arrangements of the sequence of issues, absolute dates,

and mint identifications later require modification, nevertheless, the overall accumulation of carefully indexed information provides an enormous advance in the accuracy of identifying individual examples of Alexander types and, at the same time, allows easy assessment of the regional if not specific place of production, the general chronological limits, and relative rarity of a given example.

Take, for example, *Numismatica Classica* List 3, 1980, 17 (Plate 28, 3). The reverse symbols, a caduceus in left field and monogram in exergue, are not found in Mueller, and the sale catalogue offers "Messembria (?)" as a guess about its origin. Examination of Price's comprehensive list of "Greek Letters and Monograms" also reveals that Price does not have a listing for the ⲙ monogram; however, in the "Symbols" index among the entries for "caduceus" are two issues, one certainly and the other hesitantly attributed to the island of Samothrace (Price, 662–63). A simple comparison of the example of variety 663 illustrated from the British Museum collection shows that the *Numismatica Classica* tetradrachm belongs stylistically to the rare issues that Price connects with Samothrace. So, even though in this case the exact variety of the *Numismatica Classica* example is not found in Price, it nevertheless can be placed in the context of known issues incorporated into the catalogue and appreciated for its apparent rarity.




The example just discussed raises questions about completeness and accuracy. Despite its incorporation of more than 4,070 varieties of coins struck in the name of Alexander, 238 in the name of Philipp III, and 46 in the name of Lysimachus, together with 44 varieties of "barbaric" issues and 110 examples of modern forgeries, Price's catalogue is by no means an exhaustive listing of the varieties of Alexander types and it does not solve all of the problems of attribution, arrangement, and dating that exist in Mueller's original catalogue and its supplements published in 1870 and 1873 by von Prokesch-Osten. Perhaps what Price's catalogue may be most accurately said to accomplish is to bring together in one place as much of the available information about Alexander coinages as could be compiled without undertaking exhaustive die studies of the individual mints, many of which have never been thoroughly studied. It must, however, be emphasized that without collection of a comprehensive corpus of the existing material some confusion and inaccuracy are inevitable. Even when thorough die studies are done, this can also occur, as Price's own disagreement with Margaret

Thompson's conclusions about the Alexander coinages of Miletus and Mylasa clearly demonstrates, to cite just one example (Price, pp. 274–75 and 313). As for Price's study, the extent of adjustment and correction of the attributions, sequences, and absolute chronologies will take some time to assess due to the enormous scope of the catalogue. However, examining the following case where Price himself gets into trouble may suffice to caution the unwary reader against concluding that all issues surrounding the Alexander coinages are now resolved and further study would therefore be unnecessary and unrewarding.

In his arrangement of tetradrachm varieties attributed to Pergamum (pp. 222–25), Price assigns 18 varieties (1473–90) to the period ca. 215–200. In so doing, he combines the conclusions of Fred Kleiner, who published a die study of late posthumous Alexanders of Pergamum in 1971 ("The Alexander Tetradrachms of Pergamum and Rhodes," *ANSMN* 17, pp. 95–125), and Christof Boehringer, who proposed a more extensive list and longer period of production for the Pergamene varieties than Kleiner in *Zur Chronologie mittelhellenistischer Münzserien, 220–160 v. Chr.* (1972), pp. 42–44. Price prefers Boehringer's earlier dating and assigns ca. 215 for the beginning of the late posthumous tetradrachms but, at the same time, adopts Kleiner's narrower list of varieties and differs with both Kleiner and Boehringer in assigning his own earlier date of ca. 200 for the cessation of the Alexander coinage. However, despite his basic agreement with Kleiner on the question of attribution, Price includes the varieties attributed to Pergamum by Boehringer but omitted by Kleiner in a special group labelled "Pergamum (?)" which he also dates ca. 214–200 (1491–95). "Since style and variety are not sufficiently persuasive," concludes Price, "these have been relegated here to uncertainty of Pergamum" (p. 223). While making this general concession, Price specifically rejects one of Boehringer's varieties and places it in the group of "uncertain" tetradrachms of western Asia Minor (2817), despite the fact that H. Seyrig and N. Olçay had originally attributed the example of this variety to Pergamum in their *Le Trésor de Mektepini en Phrygie* (1965), 274. Obviously there is something disturbing Price about these issues. But his explanation that the excluded variety "is best considered uncertain, although doubtless it stems from this general area" (p. 223), hardly clarifies matters.

The Pergamene Alexanders are a kind of miniature nightmare that very well represents the exceedingly difficult challenge that almost

everywhere confronts Price (or, for that matter, anyone attempting to organize a large corpus of numismatic material where the same basic type of coin is minted in many different places at many different times with little or no conscious effort to identify the issuing authority or date of issue). In the varieties attributed at one time or another to Pergamum there is (1) no identifying symbol or monogram of the issuing authority, (2) inconsistency in the artistic style of individual dies, and (3) inexplicable inclusion or exclusion and unpredictable placement of the controls on the reverses. Simply put, Price does not have, despite Kleiner's and Boehringer's die studies, enough positive information to feel certain about either the attribution or chronology of all of the varieties in question. But that does not mean that the problem is insoluble.

Apparently unknown to Price, as well as Kleiner and Boehringer, there are examples of the coins in question that provide good evidence for what belongs where. The Hague has two Alexander tetradrachms struck from the same obverse die both with the bearded head symbol in the left field (Price, 2816–17). One, Hague 403, has the distinctive  monogram placed in exergue (Plate 28, 4); and the other, Hague 269, has a  monogram in the left field and a  monogram beneath the throne (Plate 28, 5). Boehringer's attribution of the first variety to Pergamum was rejected by Price (p. 233, 2817) and both varieties placed in "uncertain" western Asia Minor. But the style of the obverse die of The Hague examples can now be compared with an Alexander tetradrachm from the Pamphylia 1977 hoard now in Copenhagen (Plate 28, 6). This example has an owl facing left in the left field of the reverse—a variety that Kleiner (series II), Boehringer (series B, 4), and Price (1474) all attribute to Pergamum without hesitation. Since the obverse die of the Copenhagen tetradrachm is virtually indistinguishable from the obverse die of The Hague examples, either the same die engraver cut both dies or they are the same die slightly recut (cf. Plate 28, 4, 5, and 6); and this is strong evidence that all three varieties, despite their very different handling of the reverse controls, were minted at the same place about the same time, Pergamum.

The Hague and Copenhagen examples emphasize a principle that Price himself normally accepts (e.g. pp. 34, 36, and 37), namely, that stylistic analysis and die study provide the most reliable sources of information for attributing varieties of the Alexander types to particular mints. The Pergamene kingdom had an Attic weight regnal coinage

that appears to have been continued, at least sporadically, even after the reduced weight cistophoric coinage was introduced ca. 180 B.C. (on this date, see Price, pp. 44 and 80, and "The Larissa 1968 Hoard [*IGCH* 237]," *Numismatic Studies in Memory of C. M. Kraay and O. Mørkholm* [1988], p. 232, G. LeRider, "La politique monétaire du royaume de Pergame après 188," *Journal des Savants* [1989], pp. xx, and R. Bauslaugh, "Cistophoric Countermarks and the Monetary System of Eumenes II," *NC* 1991, pp. 59–64; for contemporaneity of cistophors and Attic weight issues, see H. Nicolet-Pierre, "Monnaies de Pergame," *Kraay-Mørkholm* [cited above], p. 209). The best explanation for this is that while the light weight cistophors were designed to serve the monetary needs within the kingdom and, by overvaluation, preserve stocks of silver, foreign payments in so far as they could not be made in cistophors were paid in an internationally accepted Attic weight coinage. And since before the middle of the second century B.C. Alexanders remained the most widely circulating coin type—anonymous, politically neutral, and accepted virtually everywhere—it should be no surprise, but rather an understandable expedient, that the Attalids produced both regnal and Alexander varieties as necessary. Moreover, the relatively anonymous character of the Alexanders fits the situation very well, because the Attalids might have felt acute embarrassment either to have a recipient refuse to accept payment in regnal issues or, if payment were made in Alexanders, to have this concession of political weakness trumpeted by the emission of easily identified and unmistakably Pergamene Alexander types. Pergamum was not, after all, the island of Samothrace. On the contrary, The Hague varieties together with the "Pergamum (?)" issues assigned to Pergamum by Boehringer surely represent evidence of the official, though sporadic and somewhat surreptitious, minting of Alexander tetradrachms at Pergamum.

With the synopses of information concerning more than 100 mints, there are bound to be many places where opinions about individual matters of interpretation will vary from one commentator to another, and there will certainly be numerous responses to the enormous number of conclusions presented in a work of this breadth and comprehensiveness. But it should be emphasized that Price's presentation of the evidence for his conclusions is very clear, easy to follow, and acutely intelligent. These qualities are especially noticeable in the first 83 pages of the catalogue where Price provides an "Introduction" including 16 sum-

mary discussions of major questions bearing on the reconstruction of this enormous body of numismatic evidence. The vexed and controversial questions of exactly when Alexander replaced the types of his father Philip II and introduced his own designs, of what artistic sources lay behind the designs chosen, of whether or not the representation of Herakles was intended as a portrait of Alexander himself, of what the function of symbols and monograms was, of how the weights of different denominations in different metals were valued and related to one another, and of why the study of hoards, volume of output, countermarks, and other details of production and circulation yield information sufficient to allow accurate breakdown of the period of issue between the lifetime of Alexander and the early first century B.C. are all treated clearly and with an air of confidence reflecting decades of investigation and analysis.

Price's assertions and unequivocal conclusions about the questions I have just mentioned will no doubt provoke some strong reactions, and this, I think, will be a good thing and lead to a clearer understanding of both the progress that has been made in the study of Alexander coinages and the limitations of the available evidence that must be overcome before convincing attributions and reconstructions of a number of issues can be achieved. It is, nevertheless, important to understand that behind every specific assertion made in this book two basic principles appear to govern Price's attitude toward the study of the Alexander coinages both individually and collectively.

The first is that no single cause and effect explanation is sufficient to explain the enormous variation in pattern of production that exists from one period to another or one mint to another. Setting aside the historical record that concentrates disproportionately on military affairs, Price instead focuses more attention on the objective evidence of hoards (pp. 46–65) and the scattered but informative economic information provided by the literary sources (e.g. pp. 25–27 and 51), epigraphical texts or papyri (e.g. pp. 38, 39, and 76 with n. 1) and unusual processes such as countermarking (e.g. pp. 53, 67–71). What emerges is a more complex appreciation of the economic forces that influenced any individual minting authority's decision to produce or not to produce the Alexander types at any given time. Granted that the outcome is far less tidy than the sweeping generalizations of previous scholars who, for example, once believed that all posthumous Alexanders were struck as

an exuberant response to the Peace of Apamea in 189 B.C. Outlandish as that outdated belief may seem, it nevertheless reflects a powerful, underlying temptation to attribute numismatic changes to known historical developments with the related presumption that there is a direct cause and effect relationship between war and coinage. This latter is particularly hard to resist, especially since other forces of a non-military character seldom receive any notice at all in the historical record.

Price's approach is far more sophisticated. The Roman victory over Perseus in the Third Macedonian War (172–167) is, for instance, mentioned only as one of several contributing factors that collectively explain the final abandonment of civic issues of posthumous Alexanders. Abandonment is not viewed as an immediate, sweeping change but rather a series of individual economic decisions by civic leaders who responded everywhere differently. This in turn stimulates a whole new spectrum of questions. Why, for example, did the prosperous island of Chios cease minting Alexanders ca. 165 B.C. (p. 299) after more than 120 years of production but introduce no alternative Attic weight tetradrachm coinage? Why did the Aeolian city-state of Cyme abandon its ongoing but sporadic Alexander coinage ca. 170 (p. 237) and replace it with a concentrated issue of autonomous type Attic weight tetradrachms that traveled to the eastern Mediterranean in large numbers? Or why did the relatively unimportant city-state of Erythrae combine trends sometime after 189 (p. 262) and strike a rare issue that added a wreath to the reverse of an otherwise typical posthumous Alexander tetradrachm variety? These questions concern just three of the over 100 mints incorporated in Price's study. The point is that each individual mint has a different story, and Price clearly communicates this basic diversity and untidiness within the framework of his overall compilation of material.

A second underlying principle seems to qualify Price's conclusions. Despite the fact that Price does not shrink from putting forth his own judgment about major questions surrounding the Alexander coinages, even when it is obvious that his personal views are quite different from those of other scholars, he nevertheless consistently strives to keep the reader informed about what is known, what is likely, what is possible, what is conjecture, and what is unknown. It is this honest admission, and even insistence, that there is still much that we do not in fact know about Alexander's lifetime and posthumous coinages that makes the

book ultimately more satisfying than it would be if the uncertainties were either ignored or disguised. There are many important questions about hellenistic monetary history that remain to be sorted out, investigated, and answered. Price reminds the reader that it is no crime to say plainly that no satisfactory answer exists at the present time. This is very helpful and instructive, for in the midst of setting forth an enormous number of briefly argued or tentative conclusions, Price constantly points the way toward future study by acknowledging what remains uncertain or unknown. Therefore, at the same time that the catalogue provides a much needed collection of evidence presented in a highly usable format, it also provokes the reader to think about what is being—and has been—said about the Alexander coinage.

Price's treatment of the end of the coinage (pp. 79–80) demonstrates particularly well how these principles operate and how they can immediately stimulate many questions. In western Asia Minor, Attic weight tetradrachms minted in connection with religious sanctuaries appeared in the 170s. Athena Ilias at Ilium, Apollo Aktaios at Parium, Athena Nikephoros at Pergamum, Zeus Soter Epiphanes at Clazomenae, and Hera at Samos (not mentioned by Price but no doubt belonging to the same group) all had Attic weight issues struck in their honor. Price sees these new issues as potential "alliance" coinage serving needs that the posthumous Alexanders had satisfied previously and reflecting a continued preference in the region for Attic weight coins even after the Pergamene kingdom introduced the lighter cistophori. In the 160s and 150s autonomous tetradrachm issues spread, and there was "no further need for the neutral form of coinage that the Alexanders had provided" (p. 79). Thus the Alexanders like the posthumous Lysimachi of northern Asia Minor disappeared except where demand for the specific form of money continued and obligated cities to maintain production (pp. 79–80).

In addition to desire for political self-assertion and submission to monetary coercion, Price argues that basic economic changes resulting from the Roman victories over Antiochus III (189) and Perseus (167) also contributed to the end of Alexanders in Asia Minor: "large quantities of silver moved westward in the form of booty and indemnities, and access to sources of newly minted silver was seriously restricted" (p. 80). According to Price, in order to conserve silver stocks the Attalids introduced the light weight cistophoric tetradrachm coinage

ca. 180 and both the Seleucids in Syria and Perseus in Macedonia reduced the standard weight of their tetradrachm coinages ca. 172. Price connects these changes with the dramatic rise in the value of silver that occurred in Egypt in 173 and concludes, "The popularity of the Alexanders as a widely accepted, neutral 'alliance' coinage of full weight was undermined and the lighter weight coinages drove them from circulation" (p. 80).

The important point here is that rather than attributing the cessation of the coinage to any single cause, Price identifies several different forces that collectively brought about the coinage's end. This helps the reader to appreciate better the complex intersection of historical and economic causes that influenced the individual mints to suspend production of Alexander coinage. And thus, as he does elsewhere, Price succeeds in elevating the level of discussion while not imposing his own views in such a way that constructive disagreement becomes impossible.

In fact, in this reader's view, Price's conclusions, though well founded, will require some modification on the basis of further study of the scattered evidence. For example, between 189 and 165 Alexander tetradrachms clearly continued to serve as an "international" medium of exchange accepted as much from face value as assumed weight. Price cites the concentrated issue of posthumous Alexanders at Rhodes, dated ca. 202/1 (p. 317, but see n. 7, where extension into the 190s "seems preferable" for some varieties) as evidence that the "standard" for Alexander tetradrachms remained ca. 17.00 g despite consistently lower weights found among issues from the Pamphylian mints (see table B, pp. 43 and 44). Price's sample of weights is taken from the British Museum collection, supplemented by the Copenhagen and Oxford sylloge publications. A more accurate determination of the mean weight of the Rhodian issues can be seen by compiling the 106 weights published by F. S. Kleiner, "The Alexander Tetradrachms of Pergamum and Rhodes" (*ANSMN* 17 [1971], pp. 105–16). Using Price's method of rounding hundredth grams to the nearest tenth (i.e. $17.04 = 17.0$ and $17.05 = 17.1$) the mean weight of Rhodian Alexanders is actually 16.9 g. However, Price's assertion for Rhodes may be right, since 33 percent (35 of 106) of the examples recorded are 17.0 g or heavier; and this is strengthened by a comparison of 93 published examples of Chian Alexanders minted during approximately the same period (R. Bauslaugh, "The Posthumous Alexander Coinage of Chios," *ANSMN* 24

[1979], pp. 1–45, esp. pp. 21–29), since the mean weight there is 17.0 g. But even with the support of the Chian weights, it still seems clear that Price does not have the full explanation.

During the third century the mean weight of Alexanders was declining, not just in the Black Sea, as Price suggests (p. 44), but apparently everywhere. From Chios, there are 73 examples with listed weights in the group dated roughly 280–210, and the mean weight is 16.9 g (Bauslaugh, pp. 12–21), while a representative sample of Alexander tetradrachms minted in the Peloponnesus during the second half of the third century has a mean weight of 16.8 g (H. Troxell, “The Peloponnesian Alexanders,” *ANSMN* 17 [1971], pp. 41–94). Taken together with the third century lower weight Pamphylian issues noted by Price (p. 44), the overall evidence points to the conclusion that the mean weight of Alexander tetradrachms was slipping, and this is reinforced by the evidence of the Mektepini Hoard buried ca. 190 (*IGCG* 1410). Of 472 weights for Alexander tetradrachms from all sources listed by Seyrig and Olçay (above, *Mektepini*) the mean falls at 16.9 g. But, if the mean weights were declining as older tetradrachms continued to circulate and new issues were added during the third century, why would the Rhodians (and Chians at least) go against the trend at the end of the century and make their Alexanders conform more closely to the 17.0+ “standard” of fourth century Alexander issues?

In this case the answer must surely lie in the historical circumstances surrounding the emissions of ca. 210–190. The years between 205 and 199 in particular were turbulent and filled with warfare in the eastern Mediterranean. If Rhodes and Chios represent the experience of other mints, the greater attention paid to the weight of new tetradrachm issues may well denote the special determination of producing states to avoid any risk of refusal by parties for whom the money was intended. These were dangerous years and no time to cut corners where the safety of the state might be compromised. It must be admitted, however, that more study is needed. Do the Pamphylian mints follow a similar pattern? And why does the city-state of Teos, which produced a very small issue of Alexander tetradrachms during this period, seem to pay no attention to the “standard” weight? Out of six examples known to me, only one reaches 16.8 g and the mean weight is only 16.6 g.

Price sees the introduction of autonomous issues from the 170s onward as a main cause for the end of the Alexanders. Following

Gresham's law, he focuses on the reduced Attic weight of these issues in the belief that the autonomous tetradrachms drove out the Alexanders (p. 80). The problem with this is that Price's supposed distinction between the mean weight of the new autonomous issues and that of contemporary Alexanders does not exist. If we examine the mean weight of three mints that produced significant quantities of autonomous coinage beginning ca. 165, we find that 432 tetradrachms of Cyme have a mean weight of 16.5 g (J. Oakley, "The Autonomous Wreathed Tetradrachms of Kyme, Aeolis," *ANSMN* 27 [1982], pp. 1–37), 338 of Myrina have a mean weight of 16.4 g (K. Sacks, "The Wreathed Coins of Aeolin Myrina," *ANSMN* 30 [1985], pp. 1–43), and 167 of Magnesia-ad-Maeandrum have a mean weight of 16.7 g (N. Jones, "The Autonomous Wreathed Tetradrachms of Magnesia-on-Maeander," *ANSMN* 24 [1979], pp. 63–109). In comparison, 80 examples of the latest Alexander issues of Chios minted between ca. 190 and the suspension of Alexander coinage ca. 165 yield a mean weight of 16.6 g, while 143 of the latest issues of Temnus also ending ca. 165 (Price prefers ca. 170, pp. 240–41; but 168/7, p. 80) produce a mean weight of 16.3 g, and 75 post-189 Alexanders of Alabanda, 16.4 g. Moreover, the collective mean weight of Alexanders in hoards also continues to decline. In the Latakia 1759 Hoard (*IGCH* 1544; Seyrig, *Trésors*, 11) buried ca. 170 (Seyrig, ca. 169; Price, p. 63, ca. 170–65) the 42 Alexanders with listed weights have a mean weight of 16.6 g; and in the Tell Kotchek 1952 Hoard (*IGCH* 1773; Seyrig, *Trésors*, 15) buried ca. 160 (Seyrig, ca. 170–155; Price, p. 64, ca. 160 at the earliest) 53 weighed Alexanders have a mean weight of 16.5 g.

But if the weight is not, as it certainly appears from this sample, significantly different between the latest Alexanders and the new autonomous issues whether wreathed or unwreathed, why did the Alexander tetradrachms cease everywhere except the Black Sea region by ca. 165? And if the weight had already been reduced at mints still producing Alexanders after 189, why did the few mints that continued to produce Attic weight coins after ca. 165 abandon the Alexander type in favor of autonomous designs?

In order to answer these questions we need to take another look at Price's secondary contention that the end of the Alexanders in Asia Minor "is also to be linked to the rise in the value of silver that resulted from the Roman victories over Antiochus III and Perseus" (p. 80). As

Price rightly suggests, silver was not a commodity available in unlimited supply in the eastern Mediterranean regions and, after the Peace of Apamea in 189, silver became increasingly scarce. Large quantities moved from east to west in the form of indemnities and booty, and sources for replenishing the supply were more restricted. This historical development in turn generated significant increases in the value of silver known to have occurred in Egypt in 183/2 and 173 (Price, p. 44). Together, the eastern inflationary attraction and competing financial demands of the Third Macedonian War between the Romans and Perseus (172–167) must have exacerbated the scarcity and driven the exchange value still higher.

Given these circumstances, the continuation of Alexander coinages would have been lucrative for any states that had access to silver supplies. Since acceptability was no longer an issue—demand now far exceeded supply—there also would have been greater flexibility both for reducing the mean weight and even for abandoning the Alexander type altogether in preference of autonomous designs. The sudden increased production of lighter weight Alexanders at Temnus and Alabanda exactly fits this situation and no doubt reflects the efforts of these states to profit in the early years of the increased value of silver. It must be admitted, however, that the first limited issues of Attic weight autonomous types connected particularly with sanctuaries may have been intended to serve the opposite purpose, i.e. to supply the need for large denomination silver in a particular area in a form that was originally calculated to be less likely to travel abroad than the Alexanders. This would explain the small volume and quick suspension of these issues, for when authorities recognized that, despite their local designs, these issues too were being exported to meet foreign demand, they would have been halted and a different monetary strategy adopted.

After 167 the defeat of Perseus and the elimination of the Macedonian monarchy stimulated further changes. States like Cyme in Aeolis which had continued minting Alexanders after 189 now had an opportunity to supply silver to the east as a commodity with an unmistakably identifiable mark of origin. The new Attic weight autonomous issues, like wine in Chian or Rhodian style amphoras, declared their origin and thereby guaranteed the purity of metal and weight with clearer distinction than the Alexanders did. But unknown to all who joined in this

numismatic bandwagon, the obstacles proved greater than the profit, and few Attic weight autonomous tetradrachms were minted after ca. 150.

Athens provides an important exception that reinforces the basic reliability of this reconstruction. With their domestic source of silver at Laurion and control of the lucrative free trade emporium of Delos after 167, the Athenians continued to produce substantial autonomous tetradrachm issues and to a large degree met the "international" demand for large denomination silver in the later decades of the second century B.C. For most states, however, even those with strong commercial traditions and recognized autonomy, like Chios, the rewards of producing any form of Attic weight tetradrachm coinage, political or economic, were insufficient to offset the expenses, and only small denomination silver for local use succeeded the Alexander issues.

Admittedly, this explanation of the end of the Alexander coinage, while it differs in its detail from Price, is nevertheless indebted to his clear and, on the whole, convincing organization of the late posthumous Alexander material. The differences in interpretation of the evidence are meant to emphasize that there still remains much to be considered about the historical context and meaning of the numerous Alexander issues arranged in Price's catalogue. The fact remains, however, that Price is to be thanked for clearly identifying the major topics that require explanation and for putting forth his own conclusions in a straightforward fashion free of academic acrimony. His comprehensive version of the British Museum catalogue format is a sound work of broad scholarly vision and understanding that will doubtless serve for a very long time as the accepted and worthy replacement of Mueller's pioneer contribution of 1855.

ROBERT A. BAUSLAUGH
Emory University

D. T. POTTS, *The Pre-Islamic Coinage of Eastern Arabia*, with an appendix by Rémy Boucharlat and Monique Drieux, CNI Publications 14. The Carsten Niebuhr Institute of Ancient Near Eastern Studies, University of Copenhagen, Museum Tusculanum Press, 1991. 119 pp., illus. ISBN 87-7289-156-4.

This book was long in preparation and was eagerly awaited by all those—collectors, numismatists, and archaeologists alike—interested in

the history of the Persian Gulf area. It is the first monograph on a body of material little known until recently and as such it is to be saluted with the greatest enthusiasm.

The purpose of the book as stated in the Introduction (p. 9), is to present in a comprehensive fashion the coins that circulated in eastern Arabia in the pre-Islamic period. The book offers a corpus of 529 coins from five private collections. One of them, the Robert W. Morris collection, is now at the ANS (*Annual Report of the American Numismatic Society 1989*, pp. 10–12). The classification of the material is by types; the question of chronology is left “in abeyance” (p. 11).

The study starts with a brief presentation of the geographical area where the coins were found and a brief description of the sites (pp. 13–16). They can be divided into two main zones: the eastern province of Saudi Arabia with Thaj, Dhahran, al-Khobar, al-Qatif, al-Hofuf, Ayn Jawan, ash-Sha’ba, the Salt Mine Site, Jabal-Kenzan, and the United Arab Emirates with ed-Dur and Mleiha. It is unfortunate that the map on pp. 10–11 does not include all these sites and is not more detailed and broader at the same time. Though the Persian Gulf has been in the news a lot since 1990, a better map of the ancient and modern sites would have helped the reader. Similarly, the description of the archaeological sites is as succinct as can be and refers only to private correspondence with the different collectors or to the unpublished or forthcoming papers of the author himself. It may be refreshing to read a book without footnotes but, just as the geography of eastern Arabia is unfamiliar to many, so is the history and the culture of the “pre-Islamic” world, a terra incognita to many scholars since it falls between the Hellenists and the Islamists. Many foreign missions have explored the area in the past 40 years and their findings could have been at least summarized here. Perhaps the book should be considered a companion, almost an appendix, to D. T. Potts, *The Arabian Gulf in Antiquity*, vol. 2, *From Alexander the Great to the Coming of Islam* (Oxford, 1990), for only if one reads it first can the context of the coins be understood.

The presentation and classification of the material leave much to be desired. Potts excuses himself by stating that he is “not a numismatist by profession” (p. 9)—a very irritating statement when he has undertaken to write a book on coins. There are enough good catalogues available to serve as models on how to describe a coin (not to speak of the illustrious numismatists mentioned in the preface whose help is always

available). The lack of weights and die positions is unacceptable in the first comprehensive book on pre-Islamic coinage, no matter what the conditions of study were (p. 9). The photographs are poor and the awkward scale in which the coins are reproduced (p. 12: "150% of their true size for easier viewing") on the contrary makes identification difficult. I spent an unnecessarily large amount of time trying to match the coins from the Morris collection, now at the ANS (as noted on pp. 7 and 13, but without indicating in the catalogue which coins are ex Morris, now ANS) with the illustrations in the book, only to find out that not all the Morris coins are included (e.g. coins illustrated in *The Arabian Gulf*, pl. IV, h-j, now ANS 1989.114.45, 46, and 35, are inexplicably missing). Potts presents his work as a "monograph" (p. 7) and a "corpus of 529 coins" (p. 9) on pre-Islamic coinage. As such, however, it is not complete enough: a die study of these coins might not bring much information and the author cannot be criticized for not even attempting one, but at least all the previously published Arabian issues should have been included and classified, also the rare Harithat tetradrachms and other excavation coins (see G. Le Rider, *Suse sous les Séleucides et les Parthes*, Mémoires de la Mission Archéologique en Iran 38 [Paris, 1965], 497, 1 and 2; C. Arnold-Biucchi, "Arabian Alexanders," in W. E. Metcalf, ed., *Mnemata: Papers in Memory of Nancy M. Waggoner* [New York, 1991], p. 106). Even from private collections there are more coins known. The ANS has received several gifts that are not listed. The number 529 itself is arbitrary, since for class 1, the coinage of Abyatha, only three specimens are included in the catalogue but 19 are mentioned in a list on p. 18.

"Foreign issues were rare in these areas. . . . These . . . are not considered here" (p. 9). This, of course, is the prerogative of the author, though a discussion of the money circulating in eastern Arabia would have been useful. The so-called Sabaeen coins, however, should have been at least summarized, because some of the earlier attributions to south Arabia on the basis of the Sabaeen legends no longer hold. For instance the issues of Abyatha (Potts, class 1) were originally attributed to the Minaeans, but the provenance of more recently discovered specimens now points to a mint in northeastern Arabia. There is another class of imitations which was probably found in southeastern Arabia and therefore belongs in this book: the imitations of Athenian owls. Many of these are known and published (see G. F. Hill, *BMCArabia*,

pp. lxxxv, 77–80, pl. II, 24–26, for the debased series; for the more common silver imitations see H. Seyrig, “Une question de numismatique gréco-arabe,” *BullÉtOrien* 25 (1972), pp. 11–3, *SNGANS* 6 (1981), 1453–61), and two new specimens from southeastern Arabia from a private collection (illustrated here, Plate 28, A–B).

The descriptions of the coins are lengthy but imprecise. With the exception of classes 42 and 43, which bear an eagle on the reverse, or of the issues where the obverses show a Seleucid head (classes 10–12), the main types are always the same: the head of Herakles on the obverse and the seated Zeus on the reverse. Only the symbols or the attributes of Zeus change. This should have been more clearly emphasized (p. 17) and could have saved some of the wordy individual descriptions. The terminology is at times confusing. At p. 19, 1, “the features of the obverse portrait,” the head of Herakles is not a portrait of Alexander and Potts does not imply it is, so it should simply be called a head. The term “debased” in a numismatic context usually refers to the reduced purity of the metal, though in all the debased classes (5–9, 16–26, etc.) Potts must mean a deterioration of the style. Metal analyses cannot always be performed, particularly on coins from private collections. One would have hoped to find at least some comments on the metal composition of the 529 coins listed. When the purity of the silver drops significantly, even a rough specific gravity can be revealing. The progressive debasement of the metal can be a very important chronological criterion, just as the metrology can be, and it is regrettable that both have been omitted.

The author has elsewhere (“A Preliminary Report on Coins of Seleucid Date from Northeastern Arabia in the Morris Collection,” unpublished paper given at the Seminar for Arabian Studies in Cambridge, July 1984, and *The Arabian Gulf in Antiquity*, vol. 2, pp. 68–69) made some very penetrating observations on the coin types and on the cult of Zeus/Šams, and it is regrettable not to find a thorough discussion here where it really belongs.

Potts divided the 529 coins in his book “into fifty-one typological classes” (p. 11.). The term “class” was chosen to avoid confusion with Mørkholm’s series. It is with this classification that the present reviewer disagrees the most: “In presenting this material, I was torn between a desire to illustrate the finds site by site, as a series of archaeological assemblages, and a wish to proceed typologically, according to

numismatic criteria" (p. 9). The presentation of the material by site is invaluable for mint attribution, as we shall see in the conclusions, but the 51 typological classes are an unnecessary complication and make use of the book as a reference catalogue for classification rather hopeless. No matter how "debased" in style and how unusual some of these Arabian coins may seem at first, they still display very definite iconographic and stylistic characteristics that allow at least a rough chronological classification. These coins are not some kind of prehistoric objects—like nails, pins, or part of a harness—which cannot be grouped or dated except by typological details and context. They undoubtedly imitate the tetradrachms of Alexander the Great and thus have at least a terminus post quem. My own ideas have been summarized briefly elsewhere (*Mnemata*, pp. 99–15) and need not be repeated here. They are perhaps too sketchy for a corpus of this coinage but they follow C. Robin, O. Mørkholm, and O. Callot in their treatises on the problem and allow a better understanding of the material. These imitations, when they start in the second half of the third century B.C., can be divided into five main groups (vertical *shin*, horizontal *shin*, Abyatha, Harithat, and Abiel) with their variations. The coins with the vertical *shin* and those of Abiel, with the palm tree and the horse as adjuncts to the seated Zeus/Sams of the reverse, seem to be the most popular and survive through the first century A.D., in what I have called "imitations of imitations" for lack of better terminology. This classification presents a more logical and structured development of the Arabian coinages than 51 "equal" classes.

After useful tabulations of the 529 coins by site (pp. 103–6), the preliminary conclusions are presented. One cannot agree more with Potts that "If nothing else, this study should have demonstrated that the sheer number of issues attributable to eastern Arabia is far greater than was imagined." Potts has now demonstrated beyond any doubt that more than one mint was issuing these imitations. One can no longer postulate—as did Mørkholm with the evidence available to him but even M. J. Price, *The Coinage in the Name of Alexander the Great and Philip Arrhidaeus* (1991), p. 495—that Gerrha was the major mint for these Alexanders.

The chronological conclusions are less convincing. The hoard evidence is not considered at all though it offers at least some broad parameters between 250 B.C. and some of the kings of Characene in the

first century A.D. according to more recent finds. See *Mnemata*, pp. 110–12, where I omitted to mention the tetradrachm with the horizontal *shin* from the Meydancikkale hoard, 2533; new hoards are on file at the British Museum. Potts rightly cautions against interpreting the stylistic “debasement” chronologically (again the reader wished to have found here the more thorough discussion given in *The Arabian Gulf in Antiquity*, vol. 2, pp. 64–65). But between prudence and total denial of a chronological relation between prototype and imitation (p. 108) there are many finely differentiated degrees of interpretation. If nothing else the imitation is always later than the prototype, and it is safe to assume that the very stylized and geometric renderings of the reverse Zeus of classes 26–39, for example, are more likely in the first century A.D. than in the third century B.C. “Stylized” or “abstract” variants seem a more objective way of describing the imitations: “classical” and “debased” imply an aesthetic judgment, better avoided in modern scholarship.

The relatively wide circulation of the eastern Arabian coins is rightly pointed out by Potts (p. 107). This movement of coins also shows that the different mints had contacts with each other and must have influenced each other stylistically. It is therefore reasonable to assume that the progressive debasement of the silver as well as the abstract stylistic development can and must be interpreted chronologically, and that all the southeastern Arabian issues could not have been struck in the third century B.C., just as class 1 and 2 are unthinkable in the first century A.D.

In an appendix, Rémy Boucharlat and Monique Drieux present a very interesting coin mold and some coins found in Mleiha, Emirate of Sharjah, U.A.E.

In spite of its shortcomings this book, as the first comprehensive study of the subject, belongs in every numismatic library and in any library on pre-Islamic Arabia. The following list presents a concordance between the coins now at the ANS and *The Pre-Islamic Coinage of Eastern Arabia*.

<i>Potts</i>	<i>Weight</i>	<i>Findspot</i>	<i>ANS</i>
P. 14, A	4.10	Thaj	1989.114.53
I, 4, 1; CAB, 8	15.71	Thaj 1965	1989.121.2
I, 8: CAB, 7	16.58		1986.44.1

<i>Potts</i>	<i>Weight</i>	<i>Findspot</i>	<i>ANS</i>
I, 9; CAB, 9	4.02		1987.144.1
II, 4	15.71	Thaj 1964	1989.121.1
34	0.69	Thaj	1989.114.20
35	0.79	Jawan	1989.114.22
38	0.74	Jawan	1989.114.25
59	0.67	Jawan	1989.114.7
60	0.76	Gerrha, salt mine	1989.114.6
79	0.36	Jawan	1989.114.13
89	0.42	S. of Jebel al-Burayqa, near al-Shubah	1989.114.9
95	0.56	Thaj	1989.114.19
108	0.44	Thaj	1989.114.23
113	0.55	Thaj	1989.114.16
115	0.18	Thaj	1989.114.14
117	0.35	Thaj	1989.114.11
118	0.23	Thaj	1989.114.17
120	0.41	S. of Jebel al-Burayqa, near al-Shubah	1989.114.10
131	0.28	S. of Jebel al-Burayqa, near al-Shubah	1989.114.24
132	6.30	Thaj	1989.114.4
137	10.64	Thaj	1989.114.3
138	11.76	Thaj	1989.114.44
147	6.00	Vicinity of Jebel Berri GOSP, near Jubail	1989.114.52
155	7.41	Thaj	1989.114.5
163	11.13	Thaj	1989.114.42
167	4.49	Thaj	1989.114.50
168	2.62	Thaj	1989.114.49
181	6.09	S. of Jebel al-Burayqa, near al-Shubah	1989.114.51
182	7.57	E. of Dhahran-Ras Tanura road, 9.2 mi. from former Dhahran main gate	1989.114.43
183	5.80	Thaj	1989.114.36

<i>Potts</i>	<i>Weight</i>	<i>Findspot</i>	<i>ANS</i>
184	4.83	Thaj	1989.114.38
186	2.27	S. of Jebel al-Burayqa, near al-Shubah	1989.114.26
214	6.02	Thaj	1989.114.34
215	4.10	Thaj	1989.114.48
224	3.98	Thaj	1989.114.41
228	4.76	Jawan	1989.114.37
249	5.16	purchased in Qatif	1989.114.47
264	0.11	Thaj	1989.114.31
307	0.56	S. of Jebel al-Burayqa, near al-Shubah	1989.114.28
308	0.45	Thaj	1989.114.29
309	0.23	Thaj	1989.114.30
310	0.35	Thaj	1989.114.27
357	4.65	Thaj	1989.114.39
372	4.47	S. of Jebel al-Burayqa, near al-Shubah	1989.114.40
376	4.14	S. of Jebel al-Burayqa, near al-Shubah	1989.114.33
389	0.16	Thaj	1989.114.15

CARMEN ARNOLD-BIUCCHI

The American Numismatic Society

ANDREW BURNETT, MICHEL AMANDRY, AND PERE PAU RIPOLLÈS, *Roman Provincial Coinage*, vol. 1, *From the Death of Caesar to the Death of Vitellius (44 B.C.–A.D. 69)*. London and Paris: British Museum Press and the Bibliothèque Nationale, 1992. Part 1, Introduction and Catalogue, pp. xvii, 1–734, and 7 maps., Part 2, Indexes and Plates, pp. 729–812, 195 pls. ISBN 0–7141–0871–5 and 2–7177–1845–1.

This massive volume inaugurates what is probably the most ambitious and potentially influential ancient numismatic undertaking of our time, the publication by historical periods of all the local coinages of the Roman empire in a continuous, detailed corpus. It is a staggering project, conceived on a collaborative, international basis and drawing on the resources of many collections and scholars and the presses of two

national museums. If the present volume is any indication, the success of the project seems already assured. Of the three authors Pere Pau Ripollès contributed the chapter on Spain; Michel Amandry the sections on Gaul, Africa, Crete, Cyprus, Antioch, and the Roman colonies in Greece; and Andrew Burnett the rest, which comes to two-thirds of the entire text and includes also most of the catalogue of the Greek east and an extensive general introduction. Amid the firm commitment of shared collaboration, the reader will sense that Burnett was the guiding force and that the work is the product above all of his energy and vision.

The "provincial" coinages of the title are chiefly the numerous city coinages of the eastern and (down through Tiberius) western empire, to which are added the Alexandrine coinage of Roman Egypt, miscellaneous lesser regional coinages, and the coinages of the various subject or allied kingdoms at the fringes of the empire. For the past two hundred years nearly all of this material has been classified in catalogues of "Greek" coinage, which most of it is geographically and epigraphically. But historically the coinages belong to the Roman era; and one of the great achievements of this volume is its self-evident demonstration, without any special pleading or even a formal programmatic statement on the part of the authors, that these diverse coinages are indeed most meaningfully studied together as documents of Roman rule, itself characterized by regional diversity. In contrast to the conventional diachronic cataloguing of all coins from each mint from beginning to end, we are here given a synchronic arrangement by periods, and this is naturally more revealing about such broad numismatic issues as patterns of monetary production. To take just one of the more significant revelations of *RPC 1*, through its exclusive focus on the Julio-Claudian and Triumviral eras, the authors are able to show for the first time in a systematic way that most of the local bronze coinages of the early empire had already become adjusted to the Roman bronze denominational system of the as and its fractions and multiples, which means in turn that such local coins were indeed "Roman" in more than just a chronological and political sense.

The second and more elemental importance of the book is the incalculable amount of old and new data it brings together. Since the vast civic coinage of the eastern empire is notorious for its scattered and incomplete publication, the dependable presentation of virtually every local variety of the Julio-Claudian era in *RPC 1* is a triumph in the

history of numismatic documentation. Nearly all of the other included coinages appear also with improved records. And even those coinages that have been carefully catalogued elsewhere, like the Duoviral bronze of Corinth, the "Fleet" coinage of Antony, and the Alexandrian coinage of Egypt, are made easier to consult and understand by virtue of their clear summary presentation in the *RPC* format.

For a catalogue on a grand scale, it is unusually detailed. The standard entry, of which there are more than 5,000, draws upon all published and unpublished specimens in 11 major coin cabinets including London, Paris, Berlin, and Vienna. Each variety is illustrated by a prime specimen and is recorded with an average size and weight, and a rough indication of frequency is suggested by the total number of coins in the 11 core cabinets. Since the authors arranged for a great number of coins to be metallurgically analyzed for this study, most coins that would have been formerly classified as "bronze" are here more accurately identified as copper, brass, bronze, or, most commonly, "leaded bronze" (containing more than 10 percent lead). Preceding the catalogue for each city is a review of relevant bibliography, the preceding hellenistic coinage, chronology, named magistrates, and the organization of the coinage by denominational units. Most of the mint entries are substantial and informative enough to merit separate publication on their own. The city entries are in turn grouped by Roman provinces, and in the introductory pages to each provincial section of the catalogue, patterns of minting and denominational structure are discussed at the larger regional level.

These same topics are surveyed again on an empire-wide basis in the seven chapters of the General Introduction, which also treats authority for minting, iconography, and the relationship between imperial administration and local coinage. Reversing some recent trends in the scholarship, it is argued (1) that from the beginning of Augustus's principate the minting of any city coinage was normally subject to imperial approval, if not by the emperor then at least by the governor, his official representative in the province; (2) that local minting in Spain, Africa, and elsewhere in the west was discontinued after Tiberius as a matter of deliberate imperial policy; (3) that imperial policy also promoted the adoption of the emperor's portrait on civic obverses throughout the empire (cities striking major pseudo-autonomous coinages during the Julio-Claudian era are generally free cities); but (4) that the

inconsistency with which such policies were implemented suggests that they were applied indirectly though official encouragement or discouragement rather than by direct intervention. These conclusions are likely to hold the field for the foreseeable future and are developed with a restrained circumspection that characterizes the argumentation throughout the book. (In keeping with the authors' stated intention of keeping conjecture separate from historical fact many pioneering discussions, like those on the denominations of Greek civic bronzes, conclude with a disclaimer warning of the inconclusiveness of the evidence and the provisional nature of the deductions that had just been so persuasively presented !)

The authors break with old numismatic conventions by listing geographical regions/provinces from west to east, instead of clockwise around the Mediterranean, and listing cities in geographical order, instead of alphabetically, within regions. These improvements in no way hinder the reader from finding his way to the entry for a given city since the cities are repeatedly indexed; and this, together with the binding of the plates and alphabetical indexes in a separate fascicule, makes the work remarkably easy to consult. The plates are first-rate, and the seven indexes, including one of types, will satisfy the needs of any user.

Given the enormous amount of learning, effort, and intelligence that has gone into this treasure, it may seem churlish to even think of criticisms. But in a work of such breadth involving so many decisions, it is inevitable that some decisions will seem less well considered than others. As an example, a great amount of thoughtful attention was clearly given to the typography and physical appearance of the entries; yet most users are going to wonder why, when it was possible to use a nearly full epigraphical Greek font, including lunate epsilons and sigmas, cursive omegas are nevertheless represented by the Roman letter W, a jarring detail that should be corrected in later volumes.

Although it is much too late for this now, I would prefer to have the title of the series changed as well. *Roman Provincial Coinage* has a nice enough ring and complements the title of *RIC*, but it is certainly not very accurate, given that only a few of the coinages are truly "provincial" in the primary, administrative sense of the word. It would have been far better to use the term "local" coinage of the Roman Empire to describe the catalogued material, which in most cases was produced and meant to circulate only at the city level. The Preface states that

"*Roman Provincial Coinage* is intended to provide a reconstruction of the coinage minted in the provinces of the Roman Empire," but place of minting outside of Italy is hardly a meaningful criterion for a "provincial" coinage when a number of imperial precious metal coinages, including all Julio-Claudian aurei and denarii down to A.D. 64, were also minted in provincial centers. Those coinages of course are excluded from *RPC*, which "roughly speaking," according to the Preface, "aims to include everything which is not in *RIC*." Even this simple working principle, however, is not without its ironic consequences: since the catalogue for the western provinces consistently omits all coinages that were included, rightly or not, in *RIC*, it excludes the ROM ET AVG bronze of Lugdunum even though few Roman coinages were ever so genuinely "provincial" in the literal sense of being made for province-wide circulation. Two mentions in the text are all that keep this provincial bronze of Gaul from being passed over completely. The *RPC* catalogue for Asia more sensibly includes the Augustan CA bronze and the Augustan and Claudian cistophoric silver despite their listing in *RIC* because these were uniquely local coinages of and for the province of Asia. But was it right then to exclude from *RPC* the aurei and denarii that were minted at the very same mint (Pergamon) at the same time as the later Augustan cistophoric issues? I would say so, since whether or not the aurei and denarii were initially minted for local, provincial purposes, they could have readily circulated anywhere in the empire: and it is range of circulation rather than place of origin (much less inclusion in *RIC*) that should determine if a coinage belongs in the imperial or local category.

In choosing what should and should not be included in a new publication like this doubtless the most problematic coinages are the chronologically vague civic coinages that for one reason or another lack the imperial portrait. A number of these seem to have been omitted for sake of economy, and while this is perhaps understandable in so huge an undertaking, the omission of any issue from a city's numismatic profile undermines the profile's reliability. For instance, the section on Chalcis omits a large issue, Poseidon head/baetyl, that O. Picard typologically dated to the Julio-Claudian era. It is omitted from *RPC* on the grounds that its date "does not seem certain." Fair enough. But shouldn't the issue have been provisionally included anyway on the fair chance that Picard was right or that the issue at least dates somewhere between the

44 B.C. and A.D. 69 limits of his volume? Unless this issue is picked up in a later volume of *RPC*, it will have disappeared from what is intended to be the standard numismatic record of Roman imperial Greece. Similarly, the section on Rhodes, contributed by Richard Ashton, typically marks a huge advance in the understanding of a major local coinage of the period, yet we are informed of two large series, one silver and one bronze, that are probably Augustan and have been discussed by Ashton elsewhere but are here omitted because of their complexity and, again, chronological uncertainty. It would have been better to include at least a few representative issues or specimens for users of *RPC*, who will now have to turn to a second publication. Even if some or most of the coins are not surely Augustan there should still be room for them in a catalogue that begins in the 40s B.C. Also excluded from the catalogue are the smaller Rhodian bronzes "with mythological reverses." A list of types is given but it is left unclear whether these issues even belong before A.D. 69. Should we expect to see any of them in later volumes of *RPC*? In cases of difficult coinages like that of Rhodes, it would have been preferable to err, if that is possible, on the side of inclusiveness, inclusiveness being after all one of laudable goals of the *RPC* project.

The authors were right to begin the catalogue before Augustus. The years just before and after Philippi mark the real start of the romanization of currency in the Greek east, as the denarius took over as the dominant silver coin and local mints in the Aegean area began to strike bronze coins on the Roman as system. The bronze coinages of Corinth, Crete, and Antony's naval bases, the most important examples of these early eastern as coinages, are given their full due in the *RPC* catalogue (Amandry's exhaustive listing and discussion of the complicated Cretan coinage deserves special notice), not least because the Augustan coinages of Corinth and Crete are, as elsewhere, a direct continuation of these mints' Antonian coinage of the late 40s and 30s. But if the Antonian period was the pivotal time of monetary change in Aegean Greece, the *RPC* catalogue passes over perhaps a majority of the Antonian issues of other mints in the area, like that of Athens. The important Antonian bronze coinage of Sparta is an especially regrettable case in point. One can sympathize with Burnett's decision to refer the reader to Susan Grunauer-Von Hoerschelmann's fine corpus, *Die Münzprägung der Lakedaimonier* (Berlin, 1978), for this is a large and intricate coinage

with many issues and denominations. Still, a short summary of Grunauer's work with sample catalogue entries and illustrations of the main denominations would have made the coinage far more accessible than it is at present, and this in turn would have shown how readily the Spartan material fits contemporary patterns. The two common Spartan denominations were a coin of 23 mm and 7–8.5 g with a club reverse (Grunauer, table 8, "yellow" series 17) and a coin of 18–20 mm and 4.8 g with eagle reverse (Grunauer, "green" series 16), which correspond in size and weight to the light asses and semises that Corinth was minting in the late 40s and 30s. Since both Spartan denominations with identifying reverse types were continued, though with some reduction in weight, in the Augustan-Tiberian issues of Eurycles and Laco, the Roman-based denominational system of Sparta's earlier Julio-Claudian issues is actually quite clear. As Grunauer recognized (while nevertheless misidentifying the as unit), the pre-Actium coinage of Sparta began in the 40s with small denominations based on the Greek chalkous, the larger Roman semis, as, and occasional multiples (including the 28.56 g sestertius, Grunauer, "black" series 20) were successively added. Once the Roman denominations took hold, minting of the small Greek fractions was discontinued. The result is one of the earliest and perhaps best documented instances of the Romanization of a traditional Greek city coinage in Greece. In view of the many Spartan issues that must be accommodated in a short space, moreover, it seems very likely that a number of the latest issues actually belong after Actium. But however that may be, the Antonian coinage of Sparta occupies a far more significant place in the Roman transformation of Greece than any reader of *RPC* would have any reason to suspect. Here it was the victim of economy, a certain reluctance to include coins that lack a portrait or some other clear historical reference, and an additional ambivalence about when a catalogue of coins struck under the Roman Empire really ought to begin.

This last is one problem that future *RPC* volumes will not have to face. But the difficult problem of non-portrait coins will persist, and the temptation to impose economy may even increase as editors begin to confront the daunting expansion of civic coinage in the second and earlier third centuries. The temptation should be resisted: no corpus can be too inclusive. Nevertheless, the stunning achievement of the present volume is a reminder that inclusiveness is not everything. In all

other respects *RPC* sets standards of numismatic presentation and analysis that are unlikely to be surpassed in a work of this kind.

JOHN H. KROLL

The University of Texas at Austin

C. S. LIGHTFOOT, ed., *Recent Turkish Coin Hoards and Numismatic Studies*, British School of Archaeology at Ankara Monograph 12, Oxbow Monograph 7. Oxford: Oxbow Books, 1991. vii + 347 pp., illus., map. ISBN 0-946897-26-1

R. BLAND, ed., *The Chalfont Hoard and Other Roman Coin Hoards*, Coin Hoards from Roman Britain 9. London: British Museum Press, 1992. 366 pp., 32 pls. ISBN 0-7141-0875-8.

V. LÁNYI, ed., *Die Fundmünzen der römischen Zeit in Ungarn*, Band L, *Komitat Fejér*. Bonn: Dr. Rudolf Habelt GmbH; and Budapest: Kultura International, 1990. 439 pp., 8 pls., maps. ISBN 3-7749-2407-4 (Habelt) and 963-7428-02-X (Kultura).

P. Kos, ed. *Die Fundmünzen der römischen Zeit in Slowenien*, 2 vols. Berlin: Gebr. Mann, 1988. Vol. 1, 588 pp. ISBN 3-7861-1543-5. Vol. 2, 436 pp., chart, maps, index. ISBN 3-7861-1544-3.

The discovery of Roman coins continues unabated, and two things may confidently be predicted. First, whenever the last coin comes out of the ground, there will be a long lag before its publication, and second, that the publication will somehow differ in format from other comparable finds. For now it is worth simply applauding the appearance in print of an abundance of material, most of it in usable form and in some cases from unexpected sources.

The pleasantest surprise is *Recent Turkish Coin Hoards*. Eight of the 12 articles are devoted to hoards. Several of these have appeared or will appear in Turkish, but obviously publication in English will fulfill the editor's hope to make them more accessible. The hoards range from Kargı (pp. 59-70, 61 plinthophoric drachms of Rhodes down to ca. 165 B.C.), Polath (pp. 205-11, cistophori down to ca. 130 B.C.), and Herakleia (pp. 275-313, 505 New Style through ΗΡΑΚΛΕΙΑΔΗΣ-ΕΥΚΛΗΣ, Thompson 781a) on the Greek side to the large Haydere hoard

(pp. 91–180, from which it has been possible to record 2,330 of an original 5,578 coins. The detailed treatment, by Roger Bland and Pinar Aydemir, includes a useful summary and discussion of other Turkish hoards of the third century. There are also four studies not based on hoards, but “devoted to various aspects of research being carried out by Turkish and British scholars” on Ancyra in the Roman period, Cilician coins in the Haytay Museum, **C•ATIN•C•F** on a coin of Ephesus, and numismatic notes from the Tigris-Euphrates Archaeological Reconnaissance Project. Both the collaboration and the product are welcome, and it may be hoped that students of Roman coinage in the east will have a new abundance of raw material for study.

More familiar are the other volumes. *The Chalfont Hoard* (6, 624 radiates, 43 denarii, and 15 coppers through A.D. 281) is neither as large nor as exciting as the now famous Normanby hoard, which gave its name to the previous volume of the CHRB series, or the Cunetio hoard, published in a similar format. But this volume, which includes 37 other hoards as well, could almost serve as a primer for the study of Roman currency in Britain, spanning as it does the period from Tiberius to A.D. 411. Most interesting to the reviewer are the first three, from Membury, Woodham Mortimer, and Sutton, all of whose contents predate the Roman conquest. Hoards of the early Julio-Claudian period are not common even outside Britain, and here R. Hobbs, in discussing the Woodham hoard, has provided a neat table (p. 21) which summarizes the British evidence for the period. Though Woodham itself is an exception, in broad terms the profile of the hoards is clear: half or more of the coins are usually Republican, another 7 to 12 percent legionary denarii of Antony, 12 to 26 percent of Augustus, 10 to 18 percent of Tiberius. Even where the date of deposit permits, coins of Caligula are rare.

The Augustan evidence can be broken down in another way that simultaneously illustrates the relative magnitude of the two “Spanish” mints, the overwhelming size of the **C L CAESARES** coinage, and—more surprisingly—the tiny contribution of Rome’s own mint to the silver currency of later periods. Except in the little Scole hoard, **C L CAESARES** alone outnumber the coins of Rome by a factor of greater than 10:1, which may help us gauge the impact of the mint’s varied repertoire of types.

	Rome	Lugdunum		Spain 1	Spain 2	Other
		CL CAESARES	Other			
Woodham, 56	3	39	4	1	4	5
Chippenham, 11	0	9	0	0	0	2
Eriswell, 10	1	5	1	1	1	1
Membury, 32	1	21	3	0	2	5
Norton, 16	0	12	1	0	0	3
Scole, 11	1	3	4	0	2	1
Sutton, 36	1	22	3	1	5	4
Total	7	111	16	3	14	21

Though the format of most of the treatments is now familiar, the volume is the most elegantly produced of the series to date, and the illustration is extremely generous if at times disappointingly dark. The editor was one of the originators of the extremely convenient system of abbreviating repetitive third-century reverse types, and the system is now broadly familiar to students of the coinage, but neither that nor considerations of space (as pleaded at p. 10) can justify omission of a key from a volume of this scope.

Two other contributions are heartening because they represent the extension of the *FMRD* format to other countries. Indeed, Kos's *Slowenien 1* and 2 display the name of Prof. Maria Alföldi facing the title page, and the two volumes were jointly undertaken by the Kommission für Geschichte des Altertums der Akademie der Wissenschaften und Literatur in Mainz and the Slovenska Akademija Znanosti in Umetnosti, Ljubljana. Coin finds from Slovenia have been relatively inaccessible to scholars. Even if one could overcome the language barrier, the publication might be rare to unobtainable. A good illustration is provided by the hoard heretofore known as Zirkowitz, here Circovci (vol. 2, pp. 151–56, 417), a hoard of 94 aurei running through ca. A.D. 88 and quite remarkable for including no less than 17 aurei antedating the reform of Nero. The publication here replaces R. Knabl, "Fund römischer goldmünzen zu Cirkowic," *Mittheilungen des historischen Vereines für Steiermark* 2 (1851), pp. 173–81, and F. Pichler, *Die Münzen der römischen und byzantinischen Kaiser*, Repertorium der Steierischen Münzkunde 2 (Graz, 1867), pp. 6–31. Here German is the language of choice, but most users will rely on the catalogue entries, which make reference to standard modern works. A most useful aspect of these volumes—which are numbered continuously though paginated sep-

arately—is the index of hoards by terminal date (vol. 2, pp. 432–34) which makes it easy to search for hoards of interest.

The influence of *FMRD* is also evident in *FMRU*, but with some modifications that impair its utility. The chief of these is the absence of a numbering system, which will make reference cumbersome. Moreover there is no index at all, just a map of sites with an alphabetical key. Thus it is hard to know at first that the hoard from Tác (44 denarii and 3,090 antoniniani, Septimius Severus through Valerian and Gallienus [A.D. 258], pp. 343–58) is actually the one from Gorsium already published by Fitz as “Der Münzfund von Gorsium,” chapter 6 of *Der Geldumlauf der römischen Provinzen im Donaugebiet Mitte des 3. Jahrhunderts 2* (Budapest/Bonn, 1978), pp. 685–800; we are certainly not told this in the bibliography.

None of these publications is without drawbacks, but all, in their way, represent an advance in the standard of publication for the regions covered. The battle is, of course, uphill. It is depressing to read that “There is no prospect of full publication” (R. Bland, *Turkish Coin Hoards*, p. 102) of the large Iasos hoard (2,989 pieces, Macrinus-Gallienus) or (*Chalfont*, p. 7) that 31 of the hoards reported were turned up by metal detectors and that the Treasure Trove law, thought by many to be a model, is inadequate to problems presented by the very third-century material in which Britain is so rich. All the more reason to be grateful that publications, like the finds, continue unabated.

WILLIAM E. METCALF

The American Numismatic Society

JANE DEROSE EVANS. *The Art of Persuasion: Political Propaganda from Aeneas to Brutus*. Ann Arbor: The University of Michigan Press, 1992. 176 pp., 56 pls. ISBN 0-472-10282-6. \$ 39.50.

In his classic work *The Roman Revolution*, the late Sir Ronald Syme discussed the evolution of Octavian the *dux* into Augustus the *princeps* and the process of simultaneous restitution and regeneration that the emperor instituted to resolve the tensions that had split the Republic and create a new synthesis that would support his revised constitution. Augustus's program was of course part of a larger movement of integration between Rome's Italian, rustic past and the wider world she now ruled. Thus Rome, the political and military conqueror, was at the

same time being overtaken by Greek culture from within. Syme commented on the emperor's restoration of the Roman virtue of *pietas*, "a quality which derived strength from memories of the Roman past, attached men's sympathies to the majesty of the State and secured loyalty to the new regime" (p. 454). Especially in his chapters, "The National Programme" and "The Organization of Opinion," Syme focused primarily on literary and historical images, especially in the works of Vergil, Horace, and Livy, but he also mentioned such artistic monuments as the Ara Pacis, the Prima Porta statue, and the Augustan Forum, as well as coins, in the emperor's effort "to persuade men to accept the Principate and its programme" (p. 458). Syme also described the way imperial messages radiated out from Rome to the Italian towns and to distant provinces of the empire.

Paul Zanker, in *The Power of Images in the Age of Augustus*, complemented Syme's work by concentrating on the visual images of art and architecture to show how they collectively served political power by projecting the image of "a blessed world, an empire at peace under the sway of a great ruler" (p. v). Zanker saw the goal of Augustus's cultural program as "a complete moral revival" (p. 3) and did an excellent job of integrating the art works, including coins, with their historical context in his discussion of the new visual language designed to support this task. Zanker was quick to point out, however, that there was no propaganda machine at work, but rather a gradual evolution of imagery over time. Although Zanker's work illustrated very clearly how the Augustan visual arts helped create the socio-political stability that lasted well into the future, he also had to admit that the process of standardization and stagnation had stifled creative achievements.

In the work under review, Jane DeRose Evans follows in the tradition of Zanker with a fine integration of images and their historical context, but expands the discussion by considering significantly more Republican art works while narrowing the focus to a reflection on several specific organizing themes. Although the book's title seems to promise a broader study of political propaganda that might include images of the Empire as well, Evans concentrates on Republican propaganda through its culmination in the Augustan Age and specifically on propaganda involving the legends and figures of early Rome. The first chapter surveys types of propaganda and their relation to ancient Rome. Evans concludes that the Romans made extensive use of inte-

gration propaganda, the type that provokes conformity and stability and seeks to unify the subjects behind the government. After considering triumphal and tomb paintings that celebrated the great families of the Republic, Evans turns to similar mythological and historical themes depicted on Republican coins. She distinguishes between the generalized propaganda glorifying the city of Rome, with such types as Roma, the Dioscuri, Janus, or the ship's prow, and the familial or personal propaganda conveyed in types honoring the moneyer's family through association with some god or great deed of the past. Evans is quite correct to point out that scholars have too frequently conferred genealogies on moneyers without considering that a coin image using figures from the early history of Rome might be more easily understood as a social or political statement.

The bulk of Evans' book consists of a series of chapters that group various images from monuments and coins around such general themes as Aeneas, the she-wolf and twins, Romulus, the Forum Augustum, the Sabines and Rome, Numa Pompilius and Ancus Marcius, and Brutus. In each chapter, Evans summarizes Republican and Augustan images associated with the particular figure or legend and suggests possible reasons for using the theme. I believe that Evans is correct in identifying the scene on the reverse of a denarius of M. Herennius (Crawford 308/1) as Aeneas carrying Anchises rather than one of the brothers from Catana who carried their parents away from the dangers of Mt. Etna in eruption. Both stories are *exempla* of Pietas, the deity depicted on the coin's obverse, but showing only one man carrying a parent is more likely to bring to mind the story of Aeneas than that of the Sicilian brothers. Although the coin type is a little different from the one traditionally associated with Aeneas and Anchises, Evans' plates demonstrate graphically that it is almost identical with two later types more securely connected with the Aeneas story. Although scholars have traditionally identified the legend represented on Herennius's coins as that of the Sicilian brothers and rejected any link with Aeneas, I think they have placed too much weight on the possible connection between the moneyer and a M. Herennius Siculus.

In her discussion of Sabine images, Evans is right to suggest that the inclusion of a star and crescent above the head of Tarpeia on the reverse of a denarius coined by L. Titurius Sabinus (C. 344/2) signifies that Tarpeia's treacherous act took place at night. She is reaching too far,

however, when she connects the Tarpeia reverse of P. Petronius Turpilianus (*RIC*, Augustus 299) with the supposed conspiracy of the praetor M. Egnatius Rufus against Augustus. She should at least have considered Zanker's suggestion that the type celebrated the emperor's new social legislation. Zanker cites Propertius's poem about Tarpeia in support of his view that her story was used by the moneyer "as an explicit example of what happens when religion and morality are despised" (p. 161). In her chapter on Brutus, Evans correctly points out the "double vision" (pp. 147–48) necessary to see that coin types can use images that refer to family propaganda and to the contemporary political situation at the same time.

Evans sees Augustus as the main user of images from Rome's early history as political propaganda. She points out that the emperor was not merely claiming ancestry with them, but also forming "the image in which he wished to appear to the Roman people" (p. 153). This propaganda, however, aside from a few exceptions, was not featured on the coins, but on the buildings and statues erected under the emperor's patronage in the city of Rome. Evans believes that for the coins Augustus was looking for more universal symbols that would have meaning for "a larger and more diverse audience" (p. 153). Evans shows how the legends of Aeneas and Romulus were used on such monuments as the Ara Pacis, the Forum Augustum, and the Belvedere altar to reflect Augustus's many virtues and future apotheosis. Propaganda featuring figures from Rome's legendary past constitutes, of course, only a segment of Augustan political propaganda, but it does play a major role within the emperor's program.

There are a few errors and omissions that detract from the effectiveness of the text. For example, in discussing the revival by the Aemilii of the name Mamercus, Evans cites (p. 27) the *Fasti* for the consul of 77 B.C., but inexplicably restores the praenomen as Mamilius, a nomen, instead of Mamercus. In listing coins of the four Aemilii who minted alone, she cites a bronze coin (Sydenham 1368) that cannot definitely be attributed to Lepidus (p. 27) and omits his single issues (C. 419/1–3). In her chapter on Romulus, Evans does not discuss the *Fasti Triumphales* on the triumphal arch of Augustus which featured Romulus as Rome's first *triumphator*, nor does she consider Augustus's coin types (*RIC*, Augustus 272 and 402) of the emperor plowing as an echo of Romulus plowing the sacred *pomerium* around the city. Likewise, in her chapter

on Numa, Evans fails to include the denarii of P. Licinius Stolo (*RIC*, Augustus 343 and 344) which depict the *ancilia*, the sacred shields that Numa entrusted to the Salian priests (Plut. *Numa* 13). In addition, a chapter summarizing the use of themes from Rome's distant past by several of Augustus's successors would have broadened our understanding of the Roman "art of persuasion." It is also distracting that when Evans quotes from classical texts in translation she includes the citation, translator's name, publisher, city, and date all in the text instead of in the footnotes.

These problems are few, however, and *The Art of Persuasion* is a significant contribution to our understanding of visual images of the late Republic and Augustan Age and of their use as propaganda. The book is supported by a bibliography, a general index, indices of coins and citations of classical authors, and a series of marvelous plates. It will provide enjoyable scholarly reading for anyone with an interest in Roman coins, art, or history. The question of whether or not all of the artistic language from this period constitutes propaganda is a semantic one and should not detract from the fact that these images reveal Roman attitudes and values that helped Augustus, as Syme said, restore the virtue of *pietas* and in the process fostered support for and acceptance of a government that created stability out of the ashes of a civil war.

RICHARD D. WEIGEL
Western Kentucky University

MEDIEVAL AND MODERN

RAYMOND WEILLER, *La Circulation Monétaire et les Trouvailles Numismatiques du Moyen Age et des Temps Modernes au Pays de Luxembourg*, vol. 2, T. Hackens and Ghislaine Moucharte, eds., Publications d'Histoire de l'Art et d'Archéologie de l'Université Catholique de Louvain 71, Numismatica Lovaniensa 13. Louvain-la-Neuve, 1989. 285 pp., 30 pl.

The numismatic history of the Grand Duchy of Luxembourg has been covered to an extent of which other countries can only dream. While other countries still discuss how to publish their hoards, Weiller in 1975

published a volume covering not only all hoards found in Luxembourg, but also votive or foundation deposits ("Bauopfer"), excavations, and stray finds. This volume brings the 1975 publication up to date.

The first volume did cover monetary circulation in the land of Luxembourg. Much of the book was devoted to coinage decrees, almanacs depicting coins, broadsides giving exchange rates, legends about hidden treasure, as well as hoards and stray finds. Weiller drew on all the evidence available to develop a picture of Luxembourg's monetary circulation. This second volume does not go back to the literary sources, rather, it reports new hoards, excavations, and stray finds. It is divided into four sections: section A covers hoards; B covers votive deposits ("Bauopfer"); C covers excavations; and D covers stray finds. Its greatest strength is the reporting of stray finds and excavations, especially in cemeteries.

One inadequately researched area of numismatics which this work discusses is Catholic religious medals, which are often found when excavating churches or cemeteries or as stray finds nearby. Weiller makes use of and refers to the excellent work by Ursula Hagen on Rhenish religious medals, *Die Wallfahrtsmedaillen des Rheinlandes in Geschichte und Volksleben* (Cologne, 1973). Because certain saints are considered effective against specific diseases, their potential for archaeologists working in the modern period is quite great. St. Benedict and St. Roch were invoked against the plague (in the nineteenth century St. Roch extended his competence to the classic disease of rapid urbanization, cholera); the numerous St. Hubertus medals remind us that rabies begins at Calais. As religious medals become adequately catalogued, it is quite possible that archaeologists could use them to determine causes of death. Of course, not everyone buried with a St. Roch medal will have died of the plague, but if archaeologists suspect they are excavating a *Pestgrube*, finding a St. Roch medal provides useful confirmation.

Among the more interesting finds is a denier of Lothair I, found in the back garden of a house in Wintrange (this coin graces the book jacket). Also interesting are eight bracteates attributed to Hildesheim which were discovered while excavating a castle at Bourscheid between 1974 and 1986. Weiller publishes modern hoards in greater thoroughness than he has done before, providing useful confirmation of facts we suspected concerning the monetary system of Luxembourg in the nineteenth century which can only be described as eccentric. For the minor

coins, it adhered to the system of the Latin Monetary Union, but it produced no gold, using instead (after 1871) German Reichsgold exclusively. It is the only country which was simultaneously a member of both the German Zollverein and the Latin Monetary Union. Thus a major Luxembourg modern gold hoard—the Remerschen (1974) hoard (Weiller A33) with a closing date of 1909, includes issues of Baden, Bavaria, Hamburg, Hesse-Darmstadt, Prussia, Saxony, and Württemberg—about what we would expect based on mint output figures. Despite the regional titles on the coins, the nickname Reichsgold is well chosen: it was a gold coinage for the entire Reich as a whole and circulated intermingled.

Regrettably, a few coins have been misattributed. In the first volume, the coin reproduced under number 1977 in the plates from hoard A 43—the Echternach (1950) hoard—is a 2 real minted at Mexico (Castán-Cayón 1318), not Madrid, as one can see from the *croix pattée* on the reverse. In the second volume, coin number 2 of hoard A 10—the Kehlen (1976) hoard—was not minted at Segovia under Philip II, but is a 2 escudo of the Nuevo Reino of Colombia under Philip IV (Castán-Cayón 3939–56). When I showed the photograph to a specialist in this field (Joseph Lasser), he said “Probably assayer Miguel de Molano, and probably late,” which corresponds better to the time frame for this hoard (1612–49) than Weiller’s attribution. Finally, in the second volume, the square gold piece with “Gott ist unser Eckstein” and a triangle is not a Rosicrucian token (D 474), but rather a siege piece minted by the English troops during the siege of Franckenthal in 1623, see Prosper Mailliet, *Atlas des Monnaies Obsidionales et de Nécessité* (Brussels, 1868), pl. 39, variety Franckenthal 1; also August Brause-Mansfeld, *Feld-, Noth- und Belagerungsmünzen von Deutschland, Österreich-Ungarn, Siebenbürgen, Moldau, Dänemark, Schweden, Norwegen, Russland, Polen u.s.w.* (Berlin, 1897), table 10, variety Franckenthal 8. Carl Ludwig Becker made a fake of this siege piece (see George F. Hill, *Becker the Counterfeiter* [London, 1925], 345), but the Becker dies are quite different: whereas the piece listed in Weiller has the date in middle, divided by the triangle, in the Becker fake the date is part of the circular inscription. The gold piece listed in Weiller is probably genuine. Unfortunately, the coin was sold to a goldsmith around 1840 for ten francs and presumably melted, so we can no longer examine the actual coin.

JOHN M. KLEEBERG

The American Numismatic Society

P. ALAN RAYNER. *English Silver Coinage from 1649* (5th ed., rev.). London: B. A. Seaby, Ltd., 1992. xxxiv, 254 pp., illus. ISBN 1-85264-053-7. £ 19.95.

STEPHEN MITCHELL AND BRIAN REEDS, eds., *Coins of England and the United Kingdom*, Seaby's Standard Catalogue of British Coins (28th ed.). London: B. A. Seaby, Ltd., 1993. xvi, 367 pp., illus. ISBN 1-85264-025-1. £ 12.95.

These two volumes overlap slightly but basically complement each other. The first brings up to date material in H. A. Seaby's original catalogue, *English Silver Coinage 1648-1949* (the fourth edition, 1974, having been out-of-print for years). Its slightly different title is gradually becoming something of a misnomer because English circulation issues have been struck in cupro-nickel and not silver since shortly after the Second World War. This debasement had started as early as 1920 when for a brief period the market price of silver rose to a level where it was profitable to melt currency coins for bullion. Although the price soon dropped back below the mint price, the reduced fineness of .500 was retained until silver was eliminated entirely in 1946/7. Few would quibble with the organization of Part One: Pre-Decimal Currency, 1649-1971 (pp. 1-213), which treats the coins by denomination, disregarding the change in metallic content. Without Part Two: Decimal Currency 1971- (pp. 215-33) and Part Three: Nickel-Brass High-Value Coins (pp. 235-44), the content of this "silver" catalogue would be static and there would be less justification for a revised edition. The decimal issues are a logical continuation to the silver coinage. Collectors of modern coinages have a detailed variety catalogue with, to take one example, separate numbers assigned to four metal and two surface-finish varieties of the 1986 two-pound piece. This numbering system is one of the principal strengths of *ESC* and because many collectors and museums catalogue their collections by *ESC* numbers, Rayner has wisely, although "admittedly with some reluctance" (p. vi) not attempted to revise it from previous editions.

The author, however is still reluctant to assign numbers to twentieth century proofs of predecimal circulation issues which, although struck in limited numbers for museums and "V.I.P." presentations, do become available for collectors often enough that it is difficult to understand why they continue to be omitted—especially when so many varieties of

other types are given separate numbers. For instance, nine forms of the Huth pattern double florins are listed and a footnote mentions that strikings in three or more additional metals are known (p. 52). Surely there must be greater collector interest in the silver proofs of George V to Elizabeth II than in varieties in half a dozen metals of a private issue which was unofficial and not even struck at the Royal Mint. The previous edition listed official Edward VIII patterns for the first time. These are virtually the same as the "V.I.P." proofs, both in numbers struck and in availability. Even the crown-size Edward VIII fantasy pieces now have been given a collective number in this edition (p. 46). In spite of some disagreements with the selections, this reviewer is mindful that catalogues must have a single final arbiter of what is included and what ends up on the cutting-room floor. Although a few of his choices may be questioned, taken all in all Rayner has achieved an excellent balance between what exists and what should be included.

ESC is not a complete die catalogue, although note is made of over-dates, legend variations, stop varieties, misspellings and other die sinking errors (e.g. incorrectly placed design elements such as transposed shields), repunched and inverted letters, patterns and proofs, off-metals, and thick flans—but not uniface and other trial pieces, beading varieties, and slight differences in legend spacing.

A few listed varieties are doubtful: a Commonwealth 1654 shilling (990B, p. 107) which is noted as having three M's, (**COMMONWEALTH**), actually results from double striking and is not a die sinking error; a William III 1697 sixpence supposedly reading **GVLIEI MVS** (1566C, p. 150), is from a broken punch or partially filled die, similar to the so-called **IIIB** for **HIB** readings, now happily dropped from earlier editions; the **GBA** for **GRA** on a William III 1701 threepence (2003A, p. 180) is a misreading of an **A** punched with its lower left serif over the end of the **R** on the specimens I have seen and probably does not exist as a genuine misspelling from a **B**-punch. A note after the shillings of 1920 and 1921 (p. 138) refers, without apparent relevance, to Appendix II: Select Bibliography.

Another important strength is the 12-degree rarity scale: from C^3 (extremely common) to R^7 (1 or 2 examples known). Rayner has been gathering rarity information under this system for almost 40 years and, with few exceptions, the assigned rarities appear to be as accurate an estimate for the series as one can find. Obviously the numbers assigned

to most coins at the upper end of the rarity scale can only be educated guesses. Some varieties of which only one example has surfaced may be rated R^7 , R^6 (2 or 3), R^5 (5 to 10), or even R^4 (11 to 20)—apparently depending upon an estimation of what might be brought to light once an *ESC* listing has been achieved—and are not to be taken as absolutes. Rarity numbers may be changed up or down in each edition as the system is constantly refined.

Prior to the fourth edition, illustrations were by line drawings, some taken from publications originating as early as the eighteenth century. The fourth edition was illustrated with generally excellent photographs taken by P. Frank Purvey and almost all of these have been reproduced, with a few additions, in Part One of the fifth edition. Unfortunately, the reprinted illustrations are almost uniformly darker—sometimes to the point of being useless (e.g. the Charles II hammered halfcrowns on p. 59 and the William III shillings of pp. 114–15, to take only two examples with excessive loss of detail). The illustrations of recent issues in Parts Two and Three are markedly better.

There are two appendixes. “Silver and Cupro-Nickel Coinage Tables from 1816” (pp. 245–53) has seven tables of numbers struck each year from George III’s “new coinage” to decimal proofs of 1990/1, with spaces for 1992 and 1993 figures to be filled in when announced. “A Select Bibliography” (p. 254) lists a selection of earlier publications where supplementary information may be found—all familiar to specialists, but which beginners in the field will find a useful guide to further reading.

For those of us who have used previous editions until they fell apart, the 1992 version is a most welcome update. Anyone even mildly interested in British coinage of the past three and a half centuries who is not familiar with *ESC* has a treat in store. Especially recommended as background is the narrative history of British milled coinage from Elizabeth I to Elizabeth II (pp. xii–xxxiii). This section alone should place the book on the required list for all large general reference libraries.

Moving from the past few centuries to the broader picture, it may be assumed that every serious collector of British coins is familiar with and uses Seaby’s *Standard Catalogue*, if for no other reason than “S. numbers” are widely used as short-hand identifications for the entire English series. For anyone just beginning to collect or study English coins, this is *the* first book to buy. As a one-volume reference work for

preliminary identification of English coins from Celtic issues before Caesar's visit to decimal issues, the book also belongs in every reference library. "The prices quoted throughout (the) Celtic Coinage Section are for the condition in which the coin usually appears" (p. 1, note). Beginning with Roman Britain and through the hammered issues of Charles II the suggested prices, usually for coins in Fine and Very Fine condition for earlier issues and in higher grades for more recent ones, show numerous changes from last year's edition— some up and some down—to reflect the current market. Exact prices reached at auction for extreme rarities are scattered throughout.

Overall, the photographic illustrations are clearer than in *ESC*, especially for hammered coins. A few of the milled illustrations, where they duplicate those in *ESC*, suffer from the same over darkening. The Charles II second issue hammered halfcrown, 3313 on p. 219, for example, is from the same cut as at *ESC*, p. 59, with even more loss of clarity.

An astounding amount of information is crammed into the Standard Catalogue pages. Each section and, from the eighth century, each reign is introduced with historical comments as appropriate. That for King Cnut (1016–35) reads:

Son of Swegn Forkbeard, King of Denmark, Cnut was acclaimed King by the Danish fleet in England in 1014 but was forced to leave. He returned in 1015 and in 1016 agreed on a division of the country with Eadmund Ironsides, the son of Aethelred. No coins of Eadmund are known and on his death in November 1016 Cnut secured all England, marrying Emma of Normandy, widow of Aethelred.

In any catalogue listing thousands of coins issued over more than 2,000 years there are bound to be some errors—although those noticed are remarkably few. There is an apparent reluctance to renumber the types of Henry the First (pp. 78–79) and the same dating as the earlier edition is kept even though a note states, "We have put the new proposed dates against the original types in our text." James I farthing tokens are assigned to Lord Harrington (p. 177) and to Harington (p. 184). Either spelling is acceptable and these might be brought into line in the next edition. On p. 185, "odd-shaped pieces of silver plate [were struck] during the sieges of Newark, Scarborough, Carlisle and Pontefract." While this may be true for some obsidional coins of the

first three towns, Pontefract pieces were all struck on flat metal, not cut from silver plate. And later, on p. 211, Pontefract shillings that are round are all much lighter than approximately full weight pieces on lozenge shaped or octagonal planchets. Obviously they were "improved" by earlier collectors who trimmed off the corners to make them look more like normal coins and should be omitted from future editions. The last paragraph of the Charles II introduction, p. 218, should add 2751–52 to those siege pieces struck in this king's name. On p. 224 the listing of the plume halfcrown dated 1683 should be dropped down to the line for 3368. And finally, illustrations for the "small size" William IV half-sovereign, p. 276, 3830, are larger than for the "large size" coin, 3831. These are minor points and easily corrected. The catalogue is the product of many years of accumulated experience; although some of the explanatory lists and charts were first published forty-five years ago, they are almost as useful today as they were then.

Appendix I, p. 359, a select bibliography, is similar in scope to that in *ESC* and is supplemented with specific references in introductory paragraphs to many reigns. Appendix II, pp. 360–62, lists foreign legends, mostly Latin, on English coins; royal titles; and comments on numismatic clubs and societies, magazines, and dealers. Appendix III, pp. 363–65, mintmarks and other symbols, after being reproduced over and over for many years, is beginning to show its age and lose some of its usefulness. A few of the figures have darkened and solidified into almost unrecognizable black blobs (e.g. 83 gerb, 91 leopard's head, 132 clasped book) and these should be redrawn for future editions. Crowned leopard's head with collar, 91A, does not appear in the chart but is listed for Edward VII instead of Edward VI, where a rather indistinct drawing is shown (p. 159). Nevertheless, the chart remains a still useful adaptation of the original C. A. Whitton drawings published in 1948.

This reviewer has one other suggestion for future issues: the table of contents is somewhat uneven and, to be even more useful, all royal names should be included for issues before the late Anglo-Saxon period. Howel Dda of Wales (p. 64), for example, is sandwiched between Eadred (946–55) and Eadwig (955–599) but none of their names appears in the index and one needs to know to look under Kings of Wessex as a subheading under Viking Coinages to find him.

HARRINGTON E. MANVILLE
Washington, D.C.

JOHN W. ADAMS, *United States Numismatic Literature*, vol. 1: *Nineteenth Century Auction Catalogs*. Mission Viejo, CA: George Frederick Kolbe Publications, 1982, xiii, 271 pp. ISBN 0-934352-02-1. *United States Numismatic Literature*, vol. 2: *Twentieth Century Auction Catalogs*. Crestline, CA: George Frederick Kolbe Publications, 1990. xiii, 418 pp. ISBN 0-934352-02-X.

Auction catalogues certainly contain much valuable information, if only to find further examples for a die study. Yet there is perhaps no more complicated series to follow bibliographically. Some auctioneers, like William Hesslein, operated only one step ahead of the law and sought to muddy their tracks accordingly. Others, although above reproach, conducted sales through a variety of firms and under a variety of names: Wayte Raymond and Lyman Haines Low are examples.

The first volume, nineteenth century auction catalogues, generally means what it says, although some series (the Chapmans, for example) are included even though many of their best efforts are in the twentieth century. The second volume concentrates on the early twentieth century, although it does include some firms which began after the Second World War (e.g. Frank Katen). Stack's is included because it began in 1935; its auctions are listed through 1975. Adams has a listing for auctions held at the convention of the American Numismatic Association, but only lists those through 1950. He has excluded catalogue series which he evidently considers contemporary: Bowers, Paramount, Superior, the apostrophe series. Partly because of these omissions, the bibliography of Walter Breen's *Encyclopedia* remains very useful in determining the names of consigners and the contents of the catalogues. Adams's work supplements the Breen bibliography, but does not entirely replace it.

Adams' volumes are divided into two parts. The first half is a bibliographical listing of the cataloguers and their catalogues, preceded by a short biographical essay about these dealers. These biographical essays are superb, containing short histories of the lives of Cogan, Woodward, Low, Bolender, and more. Previously I would refer to the large cents anthology edited by Warren Lapp and Herbert Silberman, which had useful short biographies of notable large cent collectors and dealers at the end, compiled by William Herbert Sheldon, Walter Breen, and John

Wright. Although the Lapp-Silberman compilation has information which one cannot find in Adams (such as that Hesslein liked to sit at auction sales in his stocking feet, so he could wiggle his toes while bidding), there is much in Adams that one cannot find elsewhere. He treats his biographical subjects fairly without being fulsome. The essays are then followed by a listing and numbering of the catalogues. Each catalogue is listed with its date, number of lots, number of plates (if any), the name of the collection, and short listing of the highlights as Adams sees them. Adams also gives each catalogue a grade, ranging from A+ to C-.

The second half of the book contains tables showing the strength of various catalogues. For example, let us say the reader is interested in Colonial Indian Peace Medals. Adams assigns that category the letter "L" in his nineteenth century catalogue. A glance over Adams' tables will quickly identify those catalogues with any Colonial Peace Medals. In the case of large cents, the reader can be afford to be choosy, and can just concentrate on the catalogues of large cents rated B+ or higher. Although Adams' categories in the nineteenth century are chiefly for numismatic items from the United States or the British North American colonies—15 out of 26—he also has categories for ancients, medieval, German/French, and Oriental. These numerous categories for the United States partly reflect Adams' own interests, but they are also an accurate reflection of the contents of United States nineteenth century catalogues.

The twentieth century volume crams non-U.S. coins into even fewer categories (T through Y). This is regrettable, but at least the information is there. If it were not for Adams, it is not likely that we would know that there are approximately 25 U.S. catalogues of the early twentieth century which get a grade of A- or higher for ancient coins: a plurality of those catalogues (nine) was done by Tom Elder.

Adams' main collecting interests have been in large cents and colonial medals, but he does not slight other areas. Not only do Canadians and hard times tokens get mentioned when they feature in a catalogue, but so do multiple thalers, the Syracuse decadrachm, and the Greenland piastre. For someone whose collecting interests have been so focused, Adams is still able to appreciate a good catalogue of Latin American gold or German thalers. This remains, however, a very individual book, and the author's personality often shines through, notably when he is

cataloguing the Wayte Raymond series in the 1940s: "The usual post-1858 proofs." "Proofs, 1858 following." "Proof silver, 1858 following." "Proofs galore." "U. S. proofs." "U. S. proofs." And finally, "Endless U. S. proofs." Anyone who has read through large piles of U.S. auction catalogues at one sitting can only sympathize.

JOHN M. KLEEGER

The American Numismatic Society

CORY GILLILAND, *Sylloge of the United States Holdings in the National Numismatic Collection of the Smithsonian Institution*, vol. 1: *Gold Coins, 1785-1834*. Washington and London: Smithsonian Institution Press, 1992. xxiv, 128 pp. ISBN 1-56098-160-1. \$ 67.50.

The study of Greek numismatics has always had great prestige, and so it is understandable that other fields should adopt the name sylloge for their publications. This has been done here. Although the author says in her introduction that she has decided to follow the sylloge approach, this catalogue has many features which diverge drastically from the sylloge principle. The sylloge principle is economy of format: cram many coins onto one page. This book follows the opposite principle: the *Immune Columbia* in gold has a page to itself, the Brasher doubloon and half doubloon share a page only with each other. A 128 page book with 64 plates displays 242 coins while the ANS sylloge of Sicily, by contrast, displays more than that many coins in the first nine plates alone. Furthermore, the coins are not shown actual size, but twice actual size. This is very confusing, especially with early United States gold, where the size determines the denomination. The Greek syllogai describe the type, and then show all coins of that particular type. This sylloge arranges the coins by date, and then by denomination. The same type description is repeated over and over again.

An apparent contemporary cast counterfeit (a quarter eagle of 1796, sylloge 26) has been included, with no discussion of its authenticity. Although the author lists Newman and Bressett's *Fantastic 1804 Dollar* in her footnotes, there is no discussion of their contention that the *Immune Columbia* in gold is a nineteenth century fantasy. If she disagrees, she should say so, and give her reasons. Instead she gives the *Immune Columbia* in gold a star billing, but says nothing about the

questions raised about its authenticity. She also gives it an extensive provenance, but does not mention that the Mint obtained it in exchange for an 1804 dollar, of which Newman and Bressett remark "Each apparently knowingly traded a fabrication to the other. . . ."

The author says that the collection is being made available in the form of a sylloge because the Smithsonian must impose tight access restrictions. Yet this sylloge cannot wholly replace the coins themselves. One very important piece of information—specific gravity—is omitted. We know that the New Orleans mint debased its gold in the 1850s. It would be interesting to study the fineness of early U.S. gold as well. Furthermore, although lavish descriptions are given of the type of each coin, there is no discussion of die breaks, die states, nor of the prominent adjustment marks. Some of this is visible from the photographs (and a reexamination of the practice of adjustment at the early mint may be one of the most fruitful areas of research to come out of this sylloge), but the photographs do not show everything.

The photographs are somewhat gray in tone, but they are of excellent quality as gold can be very difficult to photograph. This is a very useful book if you need to determine die varieties of early U.S. gold, and I have already used it for that purpose. If the Smithsonian does publish all its holding in this format, we will eventually have some very useful reference volumes. I do hope, however, that future volumes will show the coins actual size.

JOHN M. KLEEBERG

The American Numismatic Society

ASIAN

JOE CRIBB, *A Catalogue of Sycee in the British Museum: Chinese Silver Currency Ingots, c. 1750–1933*, with an appendix by Mike Cowell. London: British Museum Press, 1992. 366 pp., 71 pl., other illus. ISBN 0-7141-0873-1. £ 95.

Joe Cribb of the British Museum's Department of Coins and Medals is rapidly assuming a reputation as the West's premier scholar of Oriental numismatics. With publication of *A Catalogue of Sycee in the British Museum*, he has taken a major step toward securing of that distinction.

It is not simply that his new book contains a wealth of information on a currency little-known outside China; rather, Cribb displays an unusual affinity for his subject, locating it securely and squarely within the larger context of pre-Western Chinese commercial life. Correctly viewed, these silver ingots make the crucial transition from objects of our curiosity to legitimate media of trade. And Cribb renders such a view and such a transition possible.

The author first introduces us to the subject of sycee and the growth of the British Museum's collection of this type of currency. He correctly notes that, while the use of precious-metal ingots in China may be traced as far back as the Han Period, the origins of sycee were much more recent, arising from a change in the way in which taxes were collected and forwarded. Payment in the form of silver was increasingly demanded by provincial and national officials alike. Along with the imposition of a new sales tax made entirely payable in silver (the *lijin*), and semi-official and unofficial demands for additional payments by petty tax-collectors, this tended to elevate the popularity of the silver ingot as a currency medium. And governments increasingly disbursed payments in ingot form as well. But if they (and local polities) determined the fineness of the ingots, local bankers did the actual manufacture. Cribb summarizes the nature and use of sycee:

Silver ingots made by local banks, instead of official precious metal coins, were thus the most important medium of payment used for large transactions within China throughout the eighteenth and nineteenth centuries. Silver remained a bullion currency, with its value determined at every transaction by an agreement between payer and payee as to its fineness and weight.

The silver ingots in the British Museum are a sample of the ingots which played this role. Many are stated explicitly in the inscriptions stamped on them to have been cast by a private bank, foundry, or smith specifically for the forwarding of taxes from the collection point to a higher government level, but few have an explicitly stated value or denomination.

But it must be observed that the ingots as cast were made in varying shapes and sizes and with varying details. Cribb sees this as part of a deliberate and widespread system, developed by bankers across China, to proclaim the origin, intended function, and quality of the silver ingots they traded. This system was completely private in nature, developed by the bankers' guilds. The actual body of the Cribb cata-

logue reconstructs the details of this regional system, through its classification of the ingots by classes and groups.

The various methods of casting Chinese silver ingots next engage the author's attention. With my interest in moneying technology, I found this one of the most valuable portions of the book. Cribb includes extensive citation from two early European accounts of the manufacturing process, one describing conditions at Guangzhou City, Guangdong Province (in 1866), the other at Chengdu City, Sichuan Province (in 1904). Several photographs of the actual casting process accompany this part of the introduction. Subsequent portions of the introductory text discuss the inscriptions found on ingots, the uses of ingots, names of ingots provincially applied, and the actual structure of the catalogue to come. Here, Cribb divides ingots into 11 basic categories, ranging from *yanbao* (ingots with raised ends) to *like* (gift ingots). Within these major categories, he recognizes some 92 classes, all of which are illustrated by line drawings. This concludes his introduction, which might be profitably applied to *all* sycee, not just those ingots in the British Museum.

The catalogue of the British Museum collection of sycee, naturally enough, occupies the central portion of the book, but the compiler has also included other known representatives of the 11 categories and 92 classes earlier established. The homes of these other representatives range from private collections to the Hermitage in St. Petersburg, the Bangkok Bank, the American Numismatic Society, and the National Numismatic Collection of the Smithsonian Institution. Cribb has thus created his catalogue around a central gathering of specimens, made even more valuable and useful by easy comparison with pieces found elsewhere. In all cases, as much useful information is given as possible about each ingot: type, inscription, added marks (if any), weight, dimensions, date (if known), and, of course, current provenance. Some 1,300 ingots are thus presented, along with hundreds of photographs of ingots in the British Museum, arranged according to class and group, spread across 71 plates.

In most cases, appendices of numismatic or other specialized works will be of primary interest to experts, things which others may or may not read according to individual interest and whim. This book is an exception: the reader is strongly advised to peruse *all* the appendices which have been provided, for much of importance will be found there. Forgeries of ingots are discussed and illustrated; known hoards are

described; a first-class metallurgical analysis (by Mike Cowell) is included; descriptions of paper sycee and the actual methods of handling ingots at various branches of the Hongkong and Shanghai Bank during the first 15 years of the twentieth century are recorded; and what must be the most useful and extensive bibliography ever assembled on Chinese silver ingots is included. Indices of inscriptions and a general index round out this volume.

A Catalogue of Sycee in the British Museum is obviously not a book for the masses, especially at its hefty issue-price. It is, of course, for the Orientalist and for the large numismatic library. But for those scholars and others connected with Far Eastern currencies, this book represents a landmark, an absolute necessity for the advanced researcher. And Joe Cribb is to be congratulated for its publication.

R. G. DORV

National Numismatic Collection
The Smithsonian Institution

ELIZABETH ERRINGTON AND JOE CRIBB, eds., *The Crossroads of Asia: Transformation in Image and Symbol in the Art of Ancient Afghanistan and Pakistan*. Cambridge, Eng.: The Ancient India and Iran Trust, 1992. 306 pp., illus., bibliog. ISBN 0-9158399-1-3.

This magnificent volume is the catalogue of a 1992 exhibition at the Fitzwilliam Museum, Cambridge, of small objects of metal and other materials from ancient Central Asia and India, or in modern terms, the band of territory from Tashkent to Lahore. The Achaemenids, Alexander and the Bactrian Greeks, the Śakas, the Yuezhi, the Kushans, and the Sasanians are some of the dynasties, peoples, and cultures represented in this book, most of them less than names in the modern intellectual repertoire. The present catalogue, aside from the great esthetic and historical interest of the objects represented (including some 100 coins), is one of the best introductions available to this particular world of antiquity which received, imparted, and transmitted influences to and from all its contemporaries from Rome to China. The first 51 pages are devoted to brief introductions to various topics by leading specialists, as well as an assortment of clear maps, that together amount to a handbook of the current state of knowledge in ancient Central Asian studies.

For numismatics proper, the book is important for the introductions and the discussions of coins by Joe Cribb, Curator of South Asian and Far Eastern Coins in the Department of Coins and Medals of the British Museum, and Osmund Bopearachchi of the Centre Nationale des Recherches Scientifiques, Paris. These are two of the leaders among the handful of specialists in ancient Central Asian numismatics, perhaps the only two who could have put together such an elegant, clear, and comprehensive outline of the subject. In the introduction, their sections are "Coins and the Reconstruction of History," "Chronology," and "Coin Designs as Evidence of the [sic] Art History." Cribb also collaborated with others in writing "The Historical Context" and "Alexander and His Legacy." In the catalogue, the sections "Images of Alexander the Great," "Coins Illustrating the History of the Crossroads of Asia," and "Images of Gods on Ancient Coins of the Crossroads of Asia" illustrate and discuss 94 coins in 37 large pages. There are more coins in "Stupas and Their Relic Deposits," a particularly valuable section since the authors (here primarily E. A. Errington) have brought together coins, other objects, and their containers from several nineteenth century finds that were dispersed among the departments of the British Museum and other institutions and studied separately up to now. The section "Buddha Images, 197-216" includes three more coins. Given the importance of the coins of this region in "the reconstruction of history," they are naturally mentioned frequently in the discussions of other objects.

The collector of any of these coinages will want to have this book, as will every numismatic research library. It provides a broad but plausible general picture of the history and coinage of the region that can be found nowhere else. Specialists will no doubt quibble with various interpretations of the authors; indeed, one with a limited acquaintance with the bibliography of the subject can say confidently, if perhaps too bluntly, that nearly every other specialist in this field will disagree with the authors, and nearly every other specialist, on nearly every point. The field's endemic controversy results from what seems to be (to at least one outsider) the fundamental flaw in its methodology: an over-emphasis on "the reconstruction of history" to the disadvantage of fundamental numismatic technique. In this volume, as in almost everything else written on the subject, the priority is the identification of the individuals named on the coins and the construction of narratives about them, narrative constructs that block out the messages that the coins

themselves provide, not merely by their brief inscriptions and often enigmatic images, but by their fabric, workmanship, style (in the objective sense), metrology, metal composition, die links, and other features.

In simple terms, one ought to seek among the body of ancient Central Asian coins the series that seem to come from single mints, regardless of the hypothetical political affiliation of the persons named on the coins; to try to put these series into relative chronological order; to see which of these series are parallel or similar, indicating geographical proximity; to assign the series and groups of series to known cities and regions; and only then to see what the coins, in the context of the scanty evidence from literary texts, inscriptions, and archaeology, tell us about the succession of rulers, dynasties, and cultures. In reality, of course, one does not work in this schematic step-by-step way. The essential, nevertheless, is to let the numismatic material speak for itself first before forcing it into patterns dictated by preconceived narratives.

MICHAEL L. BATES

The American Numismatic Society

Editorial Board of "Xinjiang Numismatics," *Xinjiang Numismatics*. Hong Kong: Xinjiang Art and Photo Press, Educational and Cultural Press, 1991. 24 and 234 pp., charts, color illustrations, maps, tables. No ISBN.

Xinjiang (Sinkiang in the old spelling) for most people must be one of the biggest blanks on the world map, but it is in fact a very large and diverse country with a number of ancient cities. All the trails that are collectively known as the Silk Route passed through Xinjiang, making it a recipient and transmitter of culture from all the civilizations of Eurasia. The population is basically Muslim Turkish, but many Han Chinese live there as well. Evidently numismatic activity there has become intense in recent years, judging by this very handsome and intelligently produced book by a team of some 25 persons, including both Muslims and Chinese. It is a work of popularization, but on a high level, with brief texts in Chinese and English describing each numismatic series in historical context, and copiously illustrated by excellent color photographs of coins, paper money, and archaeological sites, as well as several good clear maps. "Excellent" is not strong enough to describe the coin photos; they are perfectly executed and reproduced.

Many of the coins and paper notes are little known. There is something here to surprise anyone. The reviewer was astounded to discover that there are copper coins with Indic Karosthi inscriptions on one side and archaic Chinese on the other, issued in the city later known as Khutan in the second half of the second century or first half of the third century A.D. (pp. 14–15).

The book includes coins and notes issued in Xinjiang as well as foreign coins that circulated there. Taken together, many coinage traditions are represented: Chinese of course, but also Indian, Iranian, Byzantine, Islamic, and modern machine-struck coins. After a seven page general introduction to Xinjiang's monetary history, the book is divided into three major sections. The first covers the period of the Chinese Han through Ming dynasties, 206 B.C. to A.D. 1644. It first deals with Chinese imperial coins found in Xinjiang, including *banliang*, *wuzhu*, and later cash. In nearly every case the coin caption indicates the find-spot; these places are identified on a map on page 3 (the reader should be warned, however, that the introductory matter and the catalogue are paginated separately with Arabic numbers—there are two page 3s). These are followed by accounts of coins issued in Xinjiang itself in the same period, beginning with the Khutan coins mentioned previously, followed by *wuzhu* cash made in Bachu County and in the Qiuzi state (today Kucha); modern-type cash of Gaochang (sixth-seventh century); cash of the Turgis Khans with Sogdian inscriptions; and cash of ninth-century Xizhou with Huihu inscriptions. These are followed by several Islamic series with Arabic inscriptions, including coins of the Qarakhans Mas'ūd and Yūsuf Arslān, of the Tafghaj Khan Sulaymān, and gold coins attributed to the Chaghatay Mongols (which are really dinars of late 'Abbāsīd Baghdād, of the Khwārizmshāhs and the early Mongol period, and even a Crusader gold bezant!). There are, however, 27 Chaghatay silver dirhams, apparently from a hoard, and four of their coppers found in tombs. The section concludes with a rubbing of a dirham attributed to "Vais Khan" of the Ilibali Khanate.

The second section covers the numismatics of the Qing (Ching) dynastic period, 1644–1911. A brief overview illustrates the sort of coinage that was imported into Xinjiang: gold and silver ingots, sycee silver ingots, strings of cash, and Chinese dollars. Cash was also produced in Xinjiang, and a very nicely drawn map shows the seven Qing mints as well as the areas of circulation of "standard cash" (like that of the rest

of China) minted north of the Tianshan Mountains at Ili and Dihua, and "red cash," issued south of the mountains at Kāshghar, Yarkand, Wushi, Aqṣū, and Kucha and circulating at a tariff of 1/5 standard cash. At the end of the nineteenth century, "red cash" (so called because of its copper composition) was authorized to circulate throughout the region. From then on, Xinjiang's currency, although parallel to that of central China, was separate. The section describes other coinages of Musim and other rebels in eighteenth and nineteenth century Xinjiang, including the peculiar very thick coppers, oval in shape with one pointed end and with incised inscriptions, issued by Yarkand under the Khan of the Zhungars, Tsewang Arabtan (the translator's spelling). A rebellion by Khoja Rāshidīn, 1864–67, produced cash with Uighur inscriptions at Kucha, while at the same time Ḥabīb Allāh in Khutan issued small silver coins with a delicate and lively Arabic inscription in the Persian tradition. Other issues include the fairly well-known gold, silver, and copper coins of Ya'qūb Beg of Khūqand, 1866–77, and the similar silver tangas of Kucha and other mints, as well as an interesting tanga series from Guangxu with Chinese on one face and Arabic on the other. Machine-made silver coins began in Xinjiang in 1887, the earliest having a dragon like other Chinese provinces on one face and inscriptions in Arabic, Chinese, and Manchu script on the other. The many varieties are copiously illustrated. Even gold coins with Turkish and Chinese inscriptions were produced. Paper currency began about 1890, with large colorful notes from semi-official financial houses. Stamped brass bars also formed a part of the currency.

The third section treats the numismatics of the Republic of China, 1912–49. Xinjiang throughout most of this period, like the rest of China, was dominated by warlords whose allegiance to the central government was verbal at best, resulting in a variety of silver dollars and other coins. The most interesting part of this section are the pages on paper currency, which included "big dragon" notes, "puppies" notes, and "oil-cloth" notes. Among many, many local, district, and regional issues are those of the Russo-Asiatskii Bank, adding another language to the babel. In 1947, the Nationalist Government finally established its authority in Xinjiang and began a series of provincial notes. With barely suppressed glee, the authors describe the last of these, denominated as six billion yuan, 100 of which notes equalled one silver dollar. "Shunned by the public, they were doomed to go where they

belonged—the wastepaper basket.” In 1949, Xinjiang was taken over by the Peoples Republic government, and in 1951 standard renmenbi replaced all previous issues, ending Xinjiang’s separate numismatic history.

An appendix illustrates some ancient foreign coins that found their way to Xinjiang, including two Byzantine solidi, Sasanian drahms, Japanese and Annamese cash, coins from Khūqand and Bukharā, and modern Mexican, Russian, and Indian currency. There follows a list with detailed descriptions of the 686 numismatic objects illustrated in the catalogue, but unfortunately for the present reviewer, it is in Chinese. Four charts showing rather elegantly the evolution of different types of coins since the eighteenth century are also captioned in Chinese.

The actual authors are Dong Qingxuan and Jiang Qixiang, and the English translator is Gao Denzhang, with Xu Jianying listed as English proofreader. The English text is generally as clear and grammatical as one could want, with only a few charming errors such as “all the coins ungiven their sizes in the book are as big as their originals and the unit given sizes to some of the currencies is millimetre” (it is difficult to believe Gao translated that, since it is quite unlike the rest of the text). The layout and physical production are first-rate, with heavy slick paper and a slip-case. Unfortunately there is neither bibliography nor index. A tag stuck on the last page gives the price as \$100 (one hopes those are Hong Kong, not U.S. dollars), but it is difficult to see where the book can be purchased, unless it is from the Educational and Cultural Press, Rm. 502–505 Corn Yan Centre, 3 Jupiter St., North Point, Hong Kong.

This is really a very fine book. One looks forward to welcoming the Xinjiang numismatists into the international fraternity.

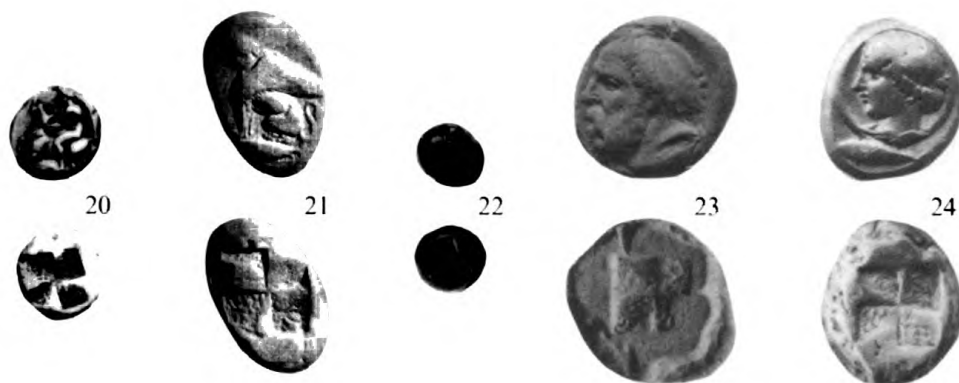
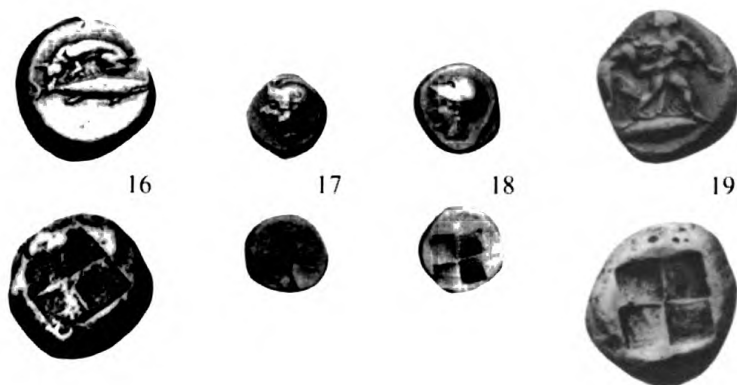
MICHAEL L. BATES

The American Numismatic Society



The Cyzicenes

Plate 2

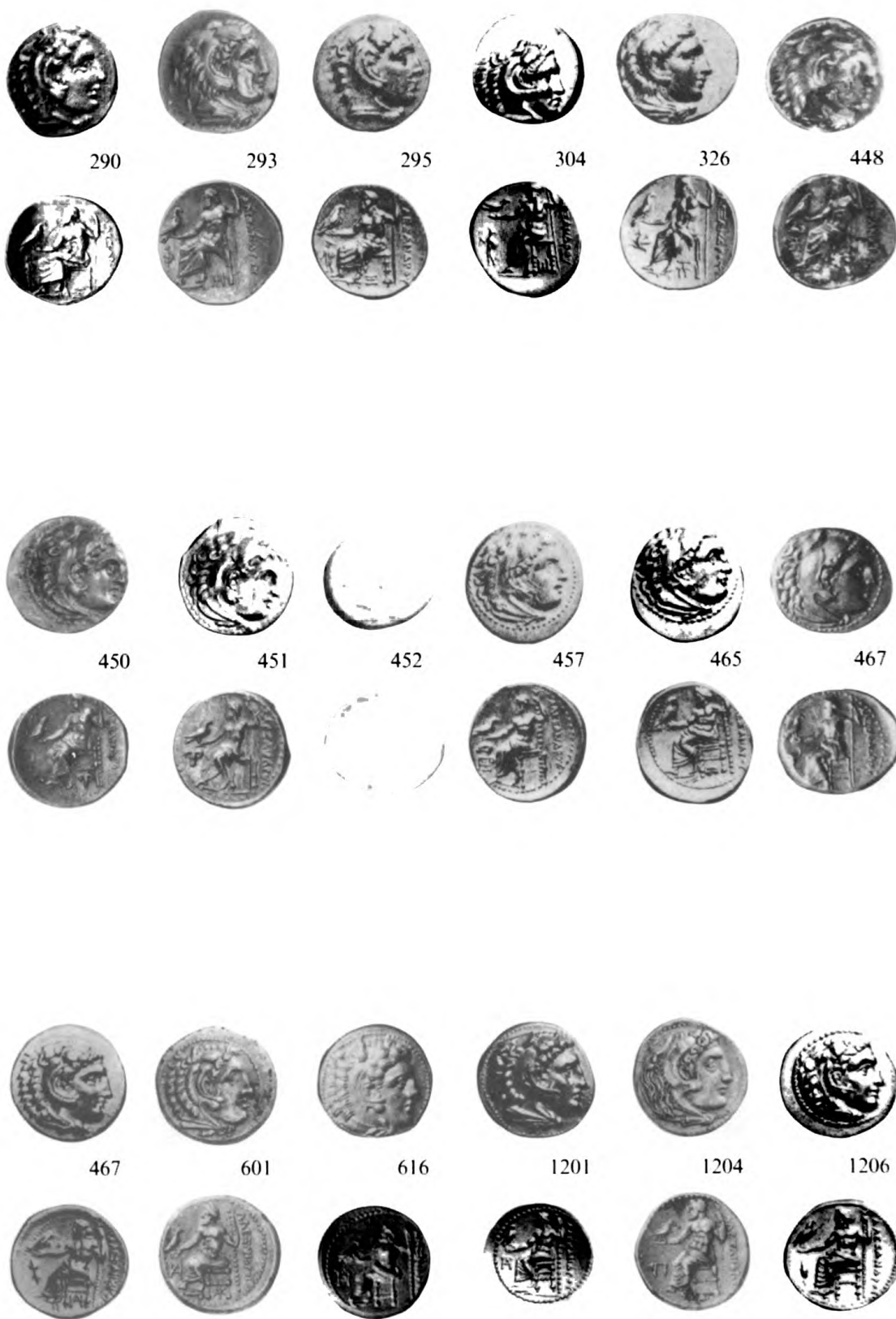


The Cyzicenes



Alexander Drachm Hoard

Plate 4

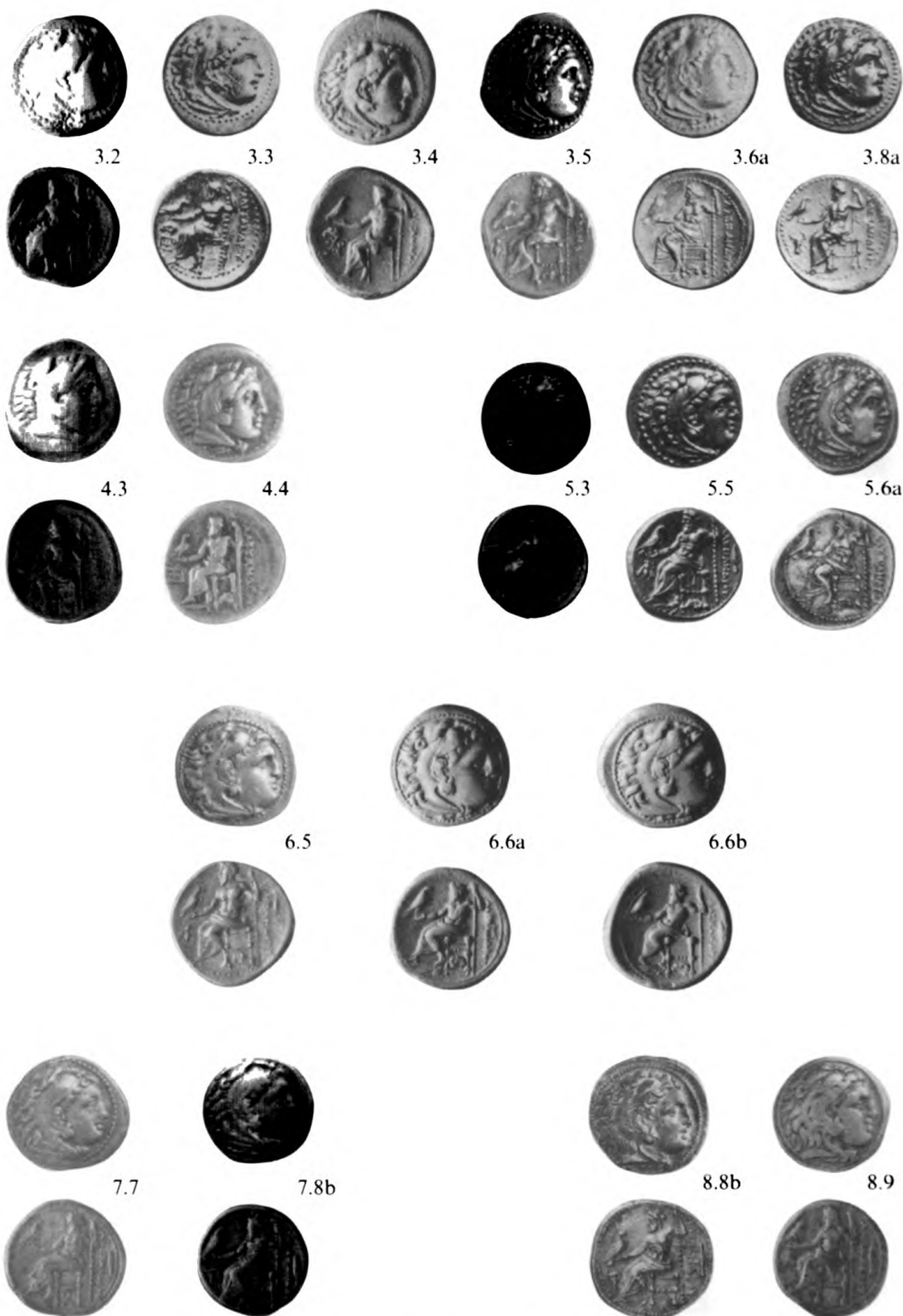


Alexander Drachm Hoard



Alexander Drachm Hoard

Plate 6



Alexander Drachm Hoard



Seleucid Notes

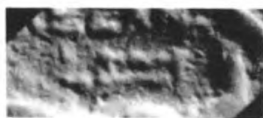
Plate 8



10



11



12



13



14



15



Seleucid Notes



Brutus

Plate 10



Issues of Galerius from Siscia

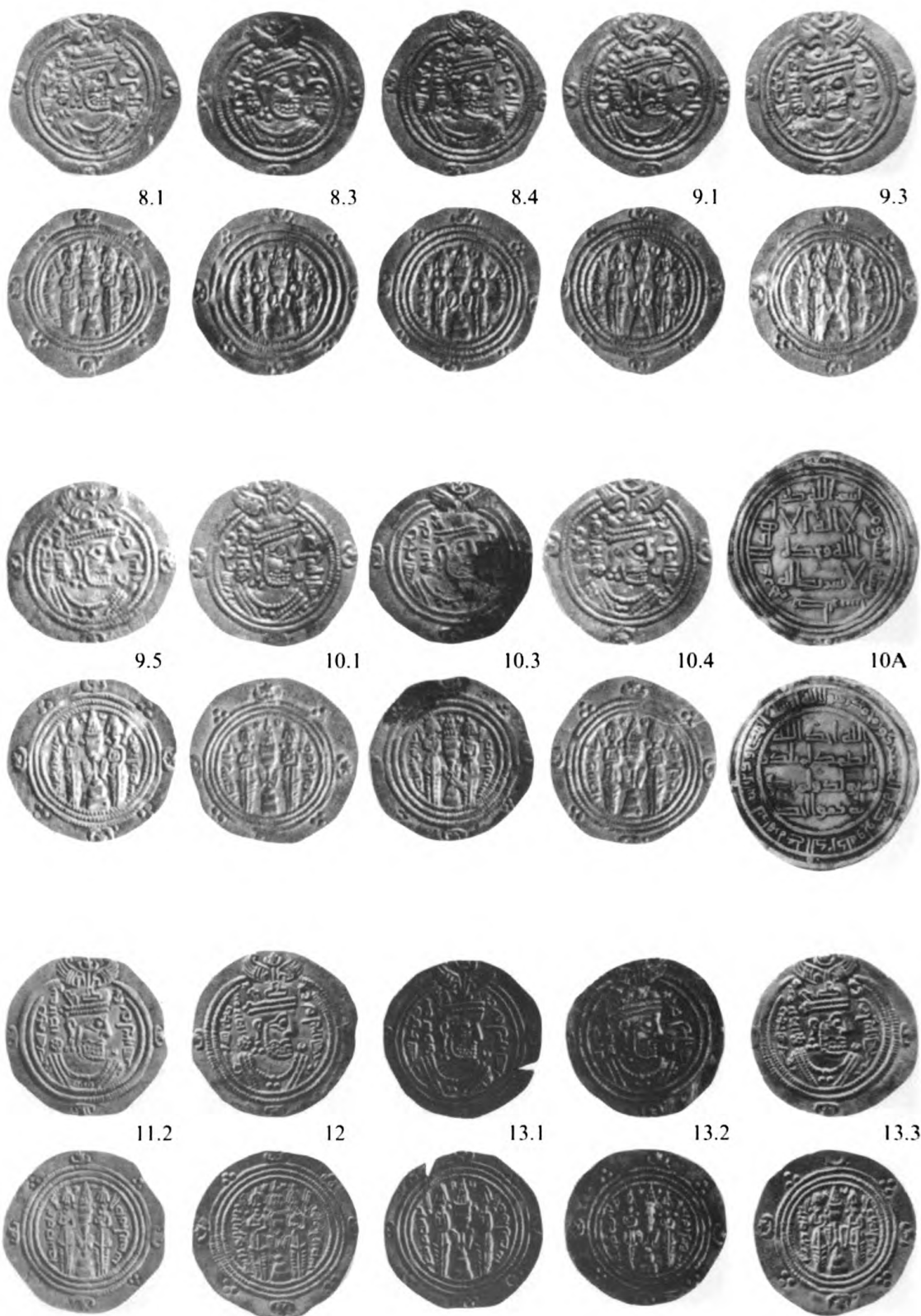


Heraclian Countermarks

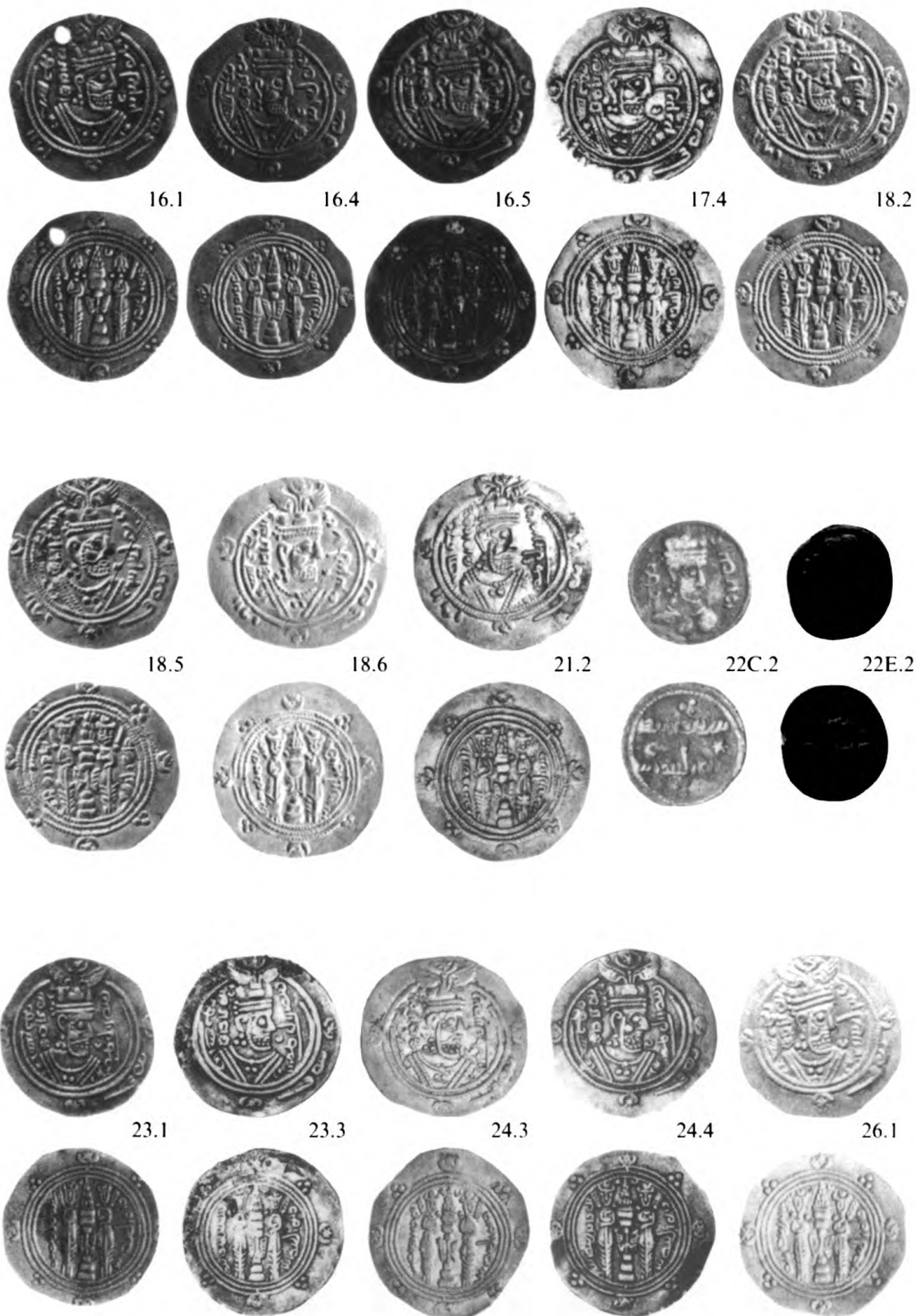


Dabūyid Ispahbads

Plate 12



Dabūyid Ispahbads



Dābūyid Ispahbads

Plate 14



Dabūyid Ispahbads



Dābūyid Ispahbads

Plate 16



Dābūyid Ispahbads



Dabūyid Ispahbads

Plate 18



Gupta Gold (coins ca. 2x)



The Sesto Brothers



The Sesto Brothers

Plate 20



7



8



9



10



12

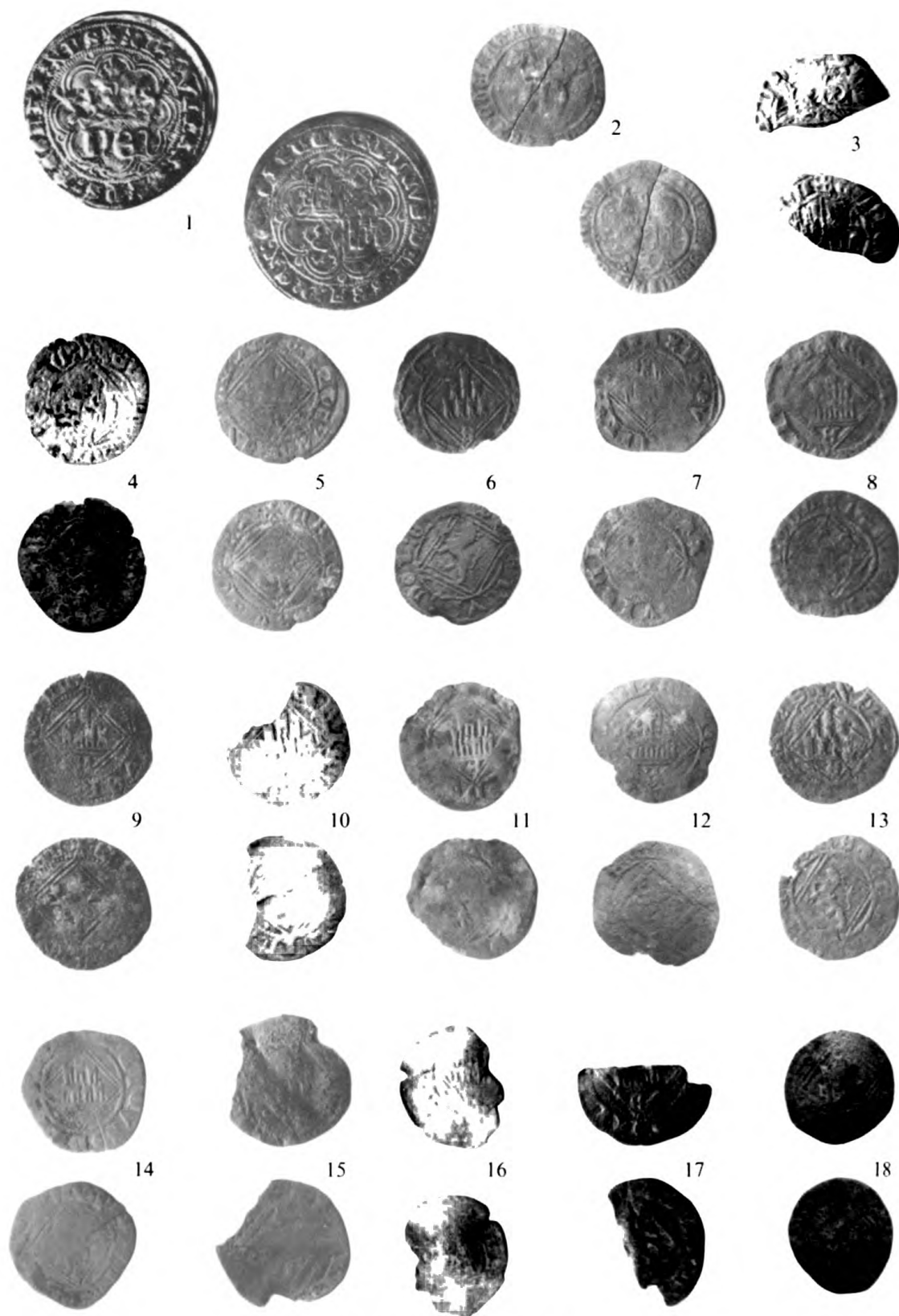
The Sesto Brothers



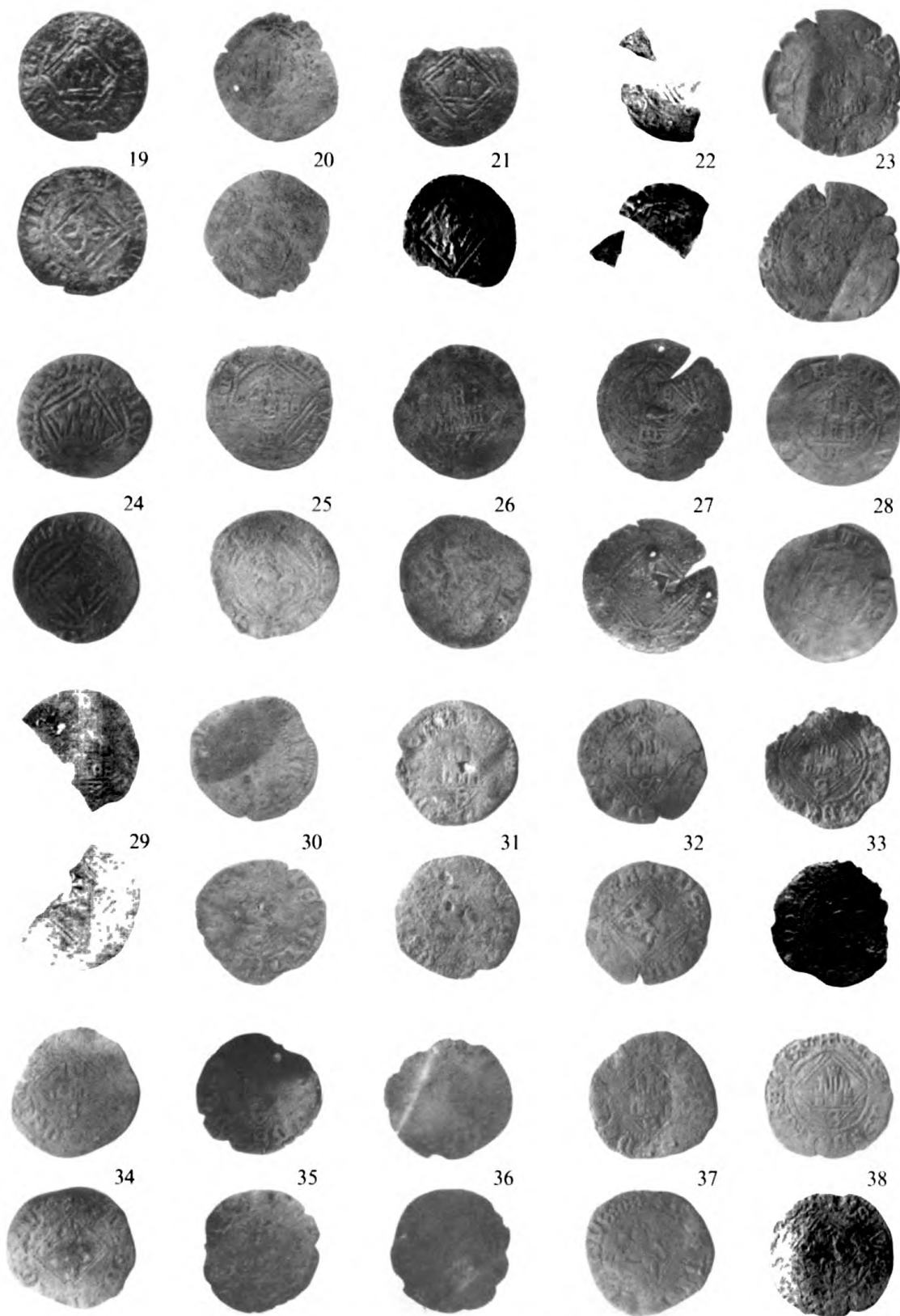
11

The Sesto Brothers

Plate 22

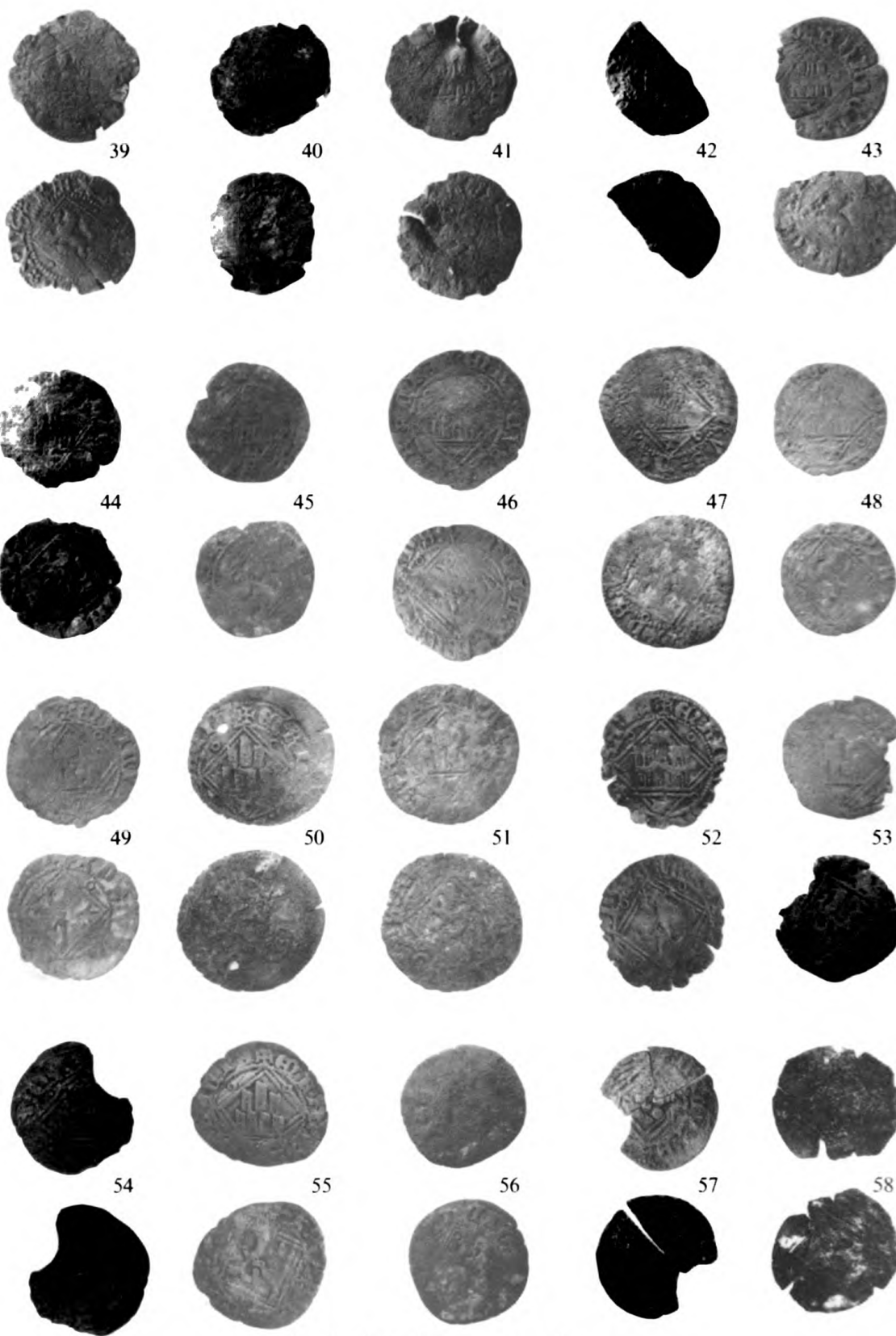


La Isabela Excavation Coins

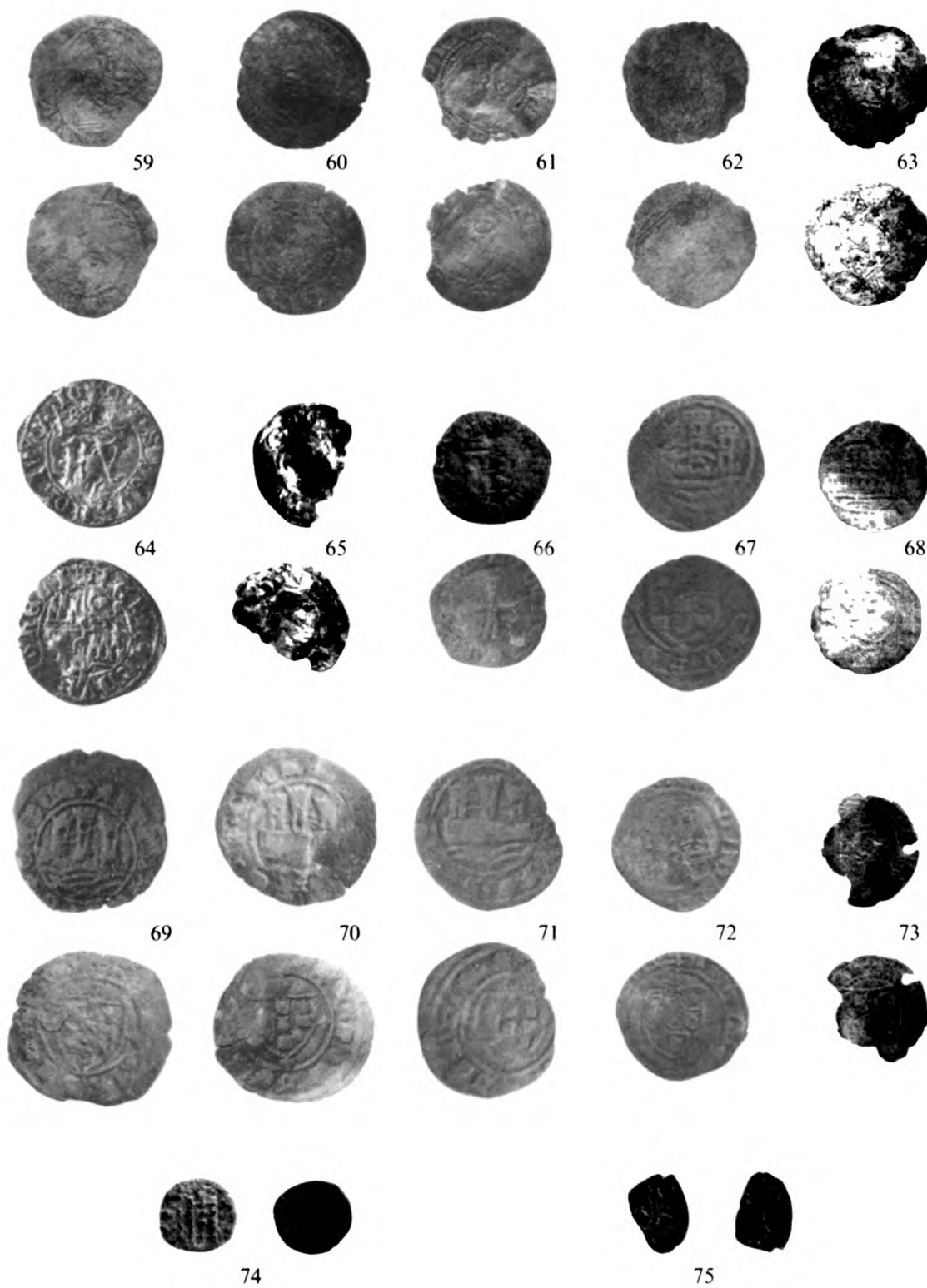


La Isabela Excavation Coins

Plate 24



La Isabela Excavation Coins



La Isabela Excavation Coins



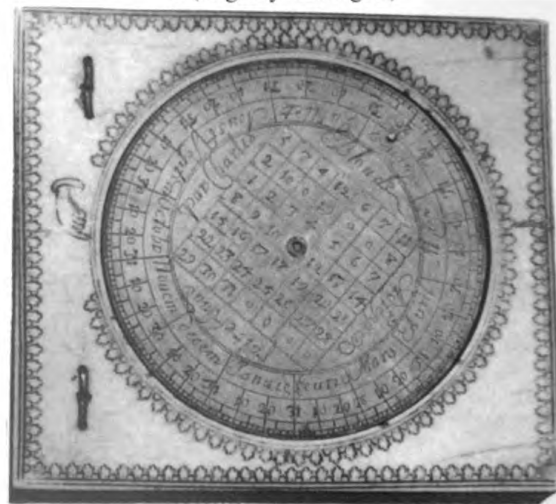
1 (2x)



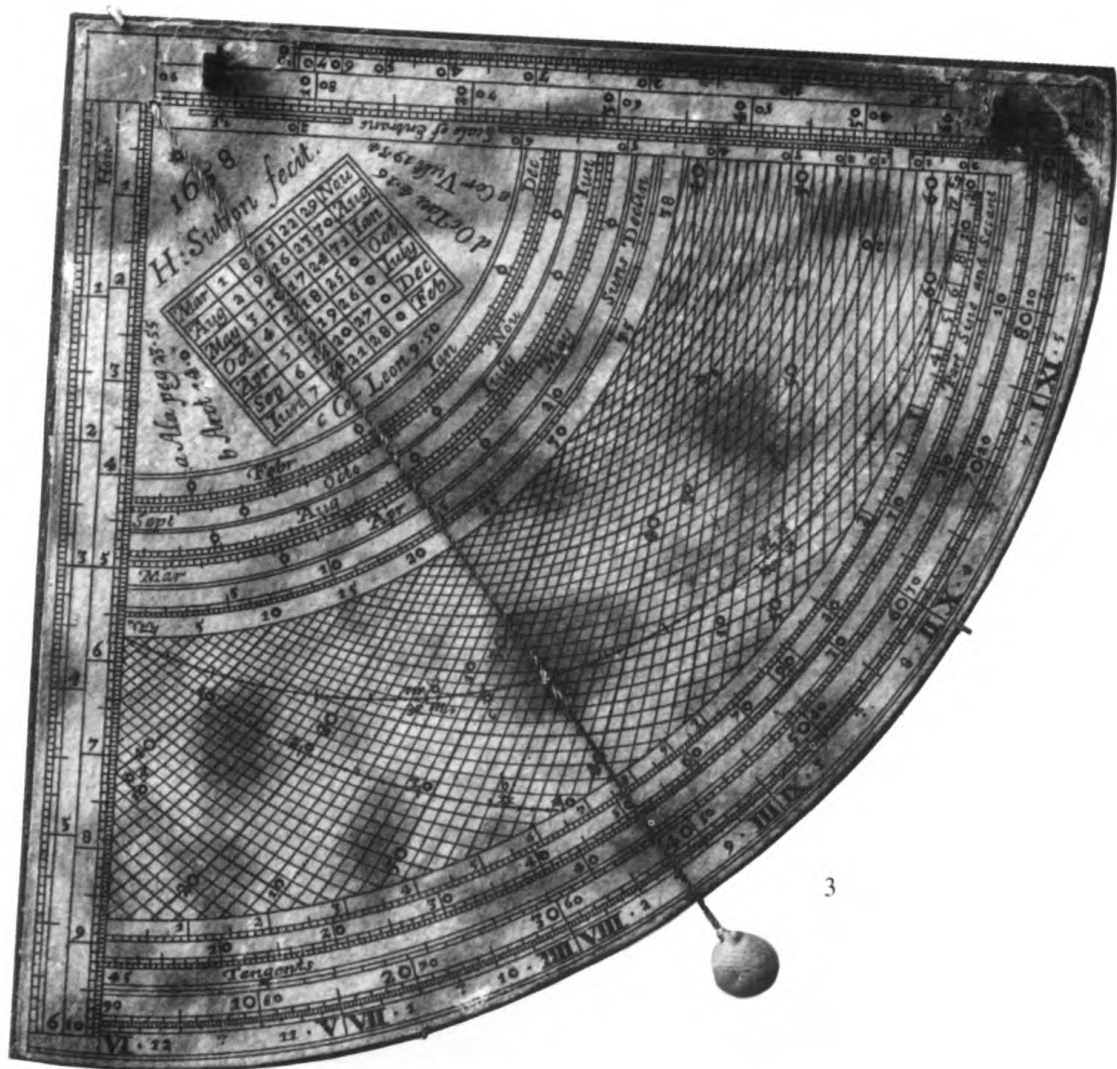
4 (slightly enlarged)



2



Coin-Calendars



Coin-Calendars

Plate 28



Reviews: Price and Potts

